University of Alberta

Is Ethical Judgment a Dimension of Auditor Expertise?

by

Mary Martha Oxner

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ABSTRACT

One of the distinguishing features of the auditing environment is the existence of multiple stakeholders who rely on auditors' judgments. Ethical dilemmas are inherent in this environment because of the potential conflicts in serving multiple stakeholders (e.g. shareholders, management, creditors, etc.) who have potentially conflicting interests (Gaa and Ponemon 1997; Mautz and Sharaf 1961). This study explored whether a sensitivity to a wide variety of potential stakeholders is a dimension of auditor expertise. Using Rest's (1984) model of ethical judgment as a framework for inquiry, experts' sensitivity to stakeholders was investigated. Expertise was operationalized by asking participating audit firms to create teams of audit seniors and managers who have been classified as either being outstanding (expert) or average (novice) based on their firm's performance evaluation records.

Using a between-subjects experimental design, this study investigated the impact of expertise and factors germane to producing judgments in an auditing environment (i.e. outcome consequences and management's intentions) on the ethical sensitivity and judgment of auditors. The results suggest that a sensitivity to multiple stakeholders is a dimension of auditor expertise. The contextual factor outcome had a robust effect on both the stakeholder sensitivity and judgment of novice auditors however expert auditors were less susceptible to the effect of outcome. Further, management's intentions had a mixed effect on stakeholder sensitivity and evaluative judgments.

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I INTRODUCTION

"By certifying the public reports that collectively depict a corporation's financial status, the independent auditor assumes a public responsibility transcending any employment relationship with the client. The independent public accountant performing this special function owes ultimate allegiance to the company's creditors and stockholders as well as to the investing public. This "Public Watchdog" function demands that the accountant maintain total independence from the client at all times and requires complete fidelity to the public trust."

- Chief Justice Warren Burger, US Supreme Court, 1984.
  Unanimous Opinion in United States v Arthur Young & Co.

1.1 RESEARCH OBJECTIVES

One of the distinguishing features of the auditing environment is the existence of multiple stakeholders who rely on auditors' judgments. Ethical[1] dilemmas are inherent in this environment because of the potential conflicts in serving multiple stakeholders (e.g. shareholders, management, creditors, etc.) who have potentially conflicting interests (Gaa and Ponemon 1997; Mautz and Sharaf 1961). Ethical dilemmas are a mix of technical and ethical issues and auditors must have expertise in both to resolve those dilemmas appropriately. The literature on auditor expertise has focused primarily on auditors' technical expertise while ethical responsibility or expertise has been largely ignored. This study examines the ethical judgment of auditors as a dimension of auditor expertise using Rest's (1984) model of ethical judgment as the framework for investigation.

[1] Ethical and moral are used interchangeably in this paper.

An auditor is ethically and professionally bound by a professional code of conduct to consider the potentially deleterious effects of an inappropriately issued audit opinion on stakeholders (*CICA Assurance Handbook* Section 5095; Shaver 1985). Although professional standards require an ethical responsibility to objectively consider all affected and interested stakeholders in the discharge of professional responsibilities (*CICA Assurance Handbook* Section 5095; Gaa and Ponemon 1997; Mautz and Sharaf 1961), recent auditing scandals such as Enron, Tyco and WorldCom suggest an emphasis on maintaining the auditor-client management relationship to the exclusion of other interested and affected stakeholders. These scandals have led some to argue against the possibility of auditor objectivity in considering these other stakeholders (e.g. Bazerman and Loewenstein 2001; Bazerman et al 1997). Despite these concerns, prior research in the auditing literature has shown that more expert auditors demonstrate a superior sensitivity to stakeholders (Tan and Trotman 2003; Jamal and Tan 2001; Tan and Jamal 2001; Shelton 1999; Kennedy and Peecher 1997; Ponemon 1995). That research supported a broadening of the conceptualization of auditor expertise to include stakeholder sensitivity to other auditors and management in its conceptualization.

The concept of auditor expertise has evolved from a conceptualization focused on technical knowledge (e.g. Gibbins and Jamal 1989; Bonner and Lewis 1990) to a conceptualization which includes various interpersonal dimensions including a concern for client management relationships (Emby and Gibbins 1989), tacit managerial knowledge (Tan and Libby 1997), interpersonal knowledge (Jamal

and Tan 2001; Kennedy and Peecher 1997), objectivity in the evaluation of subordinates (Tan and Jamal 2001; Ponemon 1995) and other personal attributes (Abdolmohammadi et al 2004; Abdolmohammadi and Shanteau 1992). Rest's (1984) model of ethical judgment recognizes the importance of stakeholder sensitivity and labels that sensitivity as ethical sensitivity. A broader scope of stakeholder sensitivity beyond the limited scope of stakeholder sensitivity demonstrated by prior auditor expertise research extends the current conceptualization of auditor expertise by recognizing ethical sensitivity, a component of ethical judgment, as a dimension of that expertise.

In an investigation of ethical judgment, the contextual factors, management's intentions and outcome, are particularly germane. Rest's (1984) model of ethical judgment and auditing standards converge in their assertions concerning the effects of both management's intentions and outcome knowledge on auditor judgment. The behavioral auditing literature however does not support those assertions.

Rest's (1984) model of ethical judgment, stakeholders who rely on auditors' judgments and professional standards (i.e. *CICA Assurance Handbook* Section 5095) all charge auditors with the assessment of management's intentions and further with detecting management fraud and other financial statement misstatements (i.e. material errors) in the financial statements (*CICA Assurance Handbook* Section 5135). The detection of management fraud is a difficult task because management may intentionally create and mask a manipulation in order to deceive the auditor (Johnson et al 1993). Success in fraud detection thus requires

auditors to understand management's intentions, motivations and opportunities to commit fraud (*CICA Assurance Handbook* Section 5135; Johnson et al, 1993). A large literature in psychology (Fussell and Kraus 1992; Ross et al 1977) and behavioral auditing (Jamal and Tan 2001; Kennedy and Peecher 1997) indicate that most people (including auditors) have great difficulty in assessing the knowledge, preferences, actions and intentions of other people (see also Tan and Jamal 2006). However, despite the difficulty of ascertaining intentions, auditing standards require, the conceptualization of ethical sensitivity asserts and stakeholders expect, auditors to be sensitive to management's intentions and to recognize the effect of those intentions on stakeholders. This conflict between behavioral auditing research results and models of ethical judgment was investigated in this study of ethical judgment in the context of the broadening of the conceptualization of auditor expertise.

Inevitably, situations will arise where an auditor will fail to correctly detect both management's intentions and a financial statement misstatement and an audit failure may occur. An audit failure occurs when an auditor issues an unqualified opinion on financial statements that are subsequently found to have been materially misstated. In the event of an audit failure, auditors' judgment processes are evaluated while the outcome is known. Rest's (1984) model of ethical judgment, like auditing standards and the law, is process-oriented not outcome-oriented consequently knowledge of outcome should not substantially affect an auditors' ethical judgment processes. The behavioral literature on the effect of outcome however indicates that outcome has a robust effect on judgment. Outcome

knowledge biases evaluations of audit quality by jurors and judges (Kadous 2000; Anderson et al 1997; Lowe and Reckers 1994). The audit profession has an elaborate practice review and professional discipline process for explaining, understanding, and disciplining audit failure. Persistence of an outcome effect in the profession's self-regulation processes may have deleterious consequences for a profession in which process not outcome should determine audit quality and auditor liability.

If auditors are susceptible to an outcome effect, then the prevailing view in the audit profession of an "expectation gap" may be incorrect. It is commonly asserted that auditors suffer in court because jurors do not understand enough about the role and responsibilities of auditors (Kadous 2000). If auditors themselves succumb to an outcome effect, then it is the more general psychological process underlying outcome effects, not unfamiliarity with auditing, that causes grief for auditors in the aftermath of a fraud or scandal. Expert auditors have exhibited a lesser susceptibility to biases (Tan and Jamal 2006; Jamal and Tan 2001; Kennedy and Peecher 1997; Ponemon 1995); a demonstration of a lack of susceptibility to the outcome effect extends our understanding of auditor expertise.

1.2 Research Contributions

This study contributes to our understanding of the ethical judgment of auditors by examining ethical sensitivity as a dimension of an expanded conceptualization of auditor expertise. Recent findings in the auditing literature demonstrate that various stakeholder sensitivities distinguish experts from others in

auditing. As the auditing environment is multi-stakeholder in nature, demonstrating a sensitivity to a broader scope of stakeholders to whom the auditor is accountable as a dimension of expertise further extends the stakeholder sensitivity dimension of the concept of auditor expertise. This study demonstrates that a sensitivity to multiple stakeholders is a dimension of auditor expertise.

Models of ethical judgment (Jones 1991; Rest 1984) and auditing standards (*CICA Assurance Handbook*), like the law, require process not outcome considerations to dominant deliberations in both the judicial system and the peer review process. Prior research has demonstrated a robust effect of outcome (favorable and unfavorable consequences) on auditor judgment but none had investigated the effect of outcome on auditors' ethical sensitivity or judgments. Results of this investigation demonstrated that experts are less susceptible than novices to the effect of outcome consequences on the ethical sensitivity and judgment of expert auditors. Novice auditors' ethical sensitivity and judgment are very susceptible to the effect of outcome knowledge.

Management's intentions should matter in evaluating auditor judgment (*CICA Assurance Handbook Section 5095*). Although auditors have a responsibility to obtain reasonable assurance that the financial statements are free from material misstatements whether due to intentional or unintentional errors, professional standards (*CICA Assurance Handbook* Section 5135) indicate that detection of intentional misstatements (such as fraud) is more difficult than detection of unintentional errors (see also Arens et al 2007; Epstein and Geiger 1994). An assessment of intention is absolutely necessary to detect fraud (Johnson et al1993).

The current auditing literature on management's intentions has not demonstrated the impact of those intentions on auditors' assessments of judgments. This study extends our current understanding of auditors' sensitivity to management's intentions and how that sensitivity affects the recognition of stakeholders and further affects the evaluations of auditors' judgments. This study demonstrates that inconsistent with the conceptualization of ethical sensitivity (Rest 1984) and with auditing standards (*CICA Assurance Handbook* Section 5095), auditors have difficulty in using intentionality information in a consistent manner.

1.3 Overview of Methodology

This thesis investigated the effect of two salient contextual factors in the audit environment (management's intentions and outcomes) and expertise on auditors' ethical sensitivity and judgment using a 2 (management's intentions) x 2 (outcome) x 2 (auditor expertise) between-subjects experimental design. In the experiment, 128 auditor participants were given one of two cases in which the financial statements were materially misstated. In one case, management intentionally overvalued an asset, whereas in the other case an overvaluation in an asset occurred unintentionally. Intention was manipulated by having a misstatement occur due to a deliberate action of management (deliberate) or by business circumstances (inadvertent). Outcome was determined by the resultant consequences which were either favorable (the client was successful and no one was negatively affected) or unfavorable (the client goes bankrupt and the auditor was sued). The classification of participants as expert or novice was made by the public

accounting firms participating in the study based on their respective firm evaluations. Participants were requested to identify and prioritize stakeholders in a scenario who could potentially be affected by the auditor's judgment as a measure of ethical sensitivity. They were also asked to provide an assessment of auditor judgment, select an alternative judgment if appropriate and provide an assessment of possible sanctions against the auditor in the scenario.

1.4 Overview of Results

The results suggest that a sensitivity to multiple stakeholders is a dimension of auditor expertise. Further, the contextual factor outcome had a robust effect on both ethical sensitivity and judgment for the novice auditors only. Expert auditors however were less susceptible to the effect of knowledge of the outcome consequences than were novice auditors. Further, contrary to both the conceptualization of ethical judgment (Rest 1984) and auditing standards but consistent with the behavioral literature, management's intentions had an inconsistent effect on auditors' ethical sensitivity and ethical judgments.

1.5 Thesis Organization

The remainder of this thesis is organized into seven chapters. Chapter 2 provides a review of the relevant literature. That review consists of a discussion of the ethical nature of the auditing environment, of modeling ethical judgment and of an evolving conceptualization of expertise within that environment extended to include ethical sensitivity as a possible dimension of auditor expertise. The relevant

literature on management's intentions and outcome, the two contextual factors of interest in this study, is also discussed. Chapter 3 develops the hypotheses. Chapter 4 describes the method employed and Chapters 5 and 6 present the descriptive and statistical analyses respectively. Chapter 7 provides a discussion the results of this study and Chapter 8 presents the implications and the limitations of this study and some concluding remarks.

2 LITERATURE REVIEW

2.1 INTRODUCTION

One of the distinguishing features of the auditing environment is the existence of multiple stakeholders who rely on auditors' judgments. Ethical dilemmas are inherent in this environment because of the potential conflicts in serving stakeholders who have potentially conflicting interests, intentions, welfare and expectations. Professional auditing standards require both technical competency and an ethical responsibility to consider all affected and interested stakeholders in the discharge of professional responsibilities (Mautz and Sharaf 1961). Although technical competency is essential to auditors' professional judgments, in many situations, auditors' ethical judgments determine the overall quality of their professional judgments (Gibbins and Mason 1988). Indeed, ethical dilemmas (e.g. conflict of interest, independence issues, alternation of financial information (Finn et al 1988)) are usually a mix of technical and ethical issues and professionals must have both the technical and the ethical expertise to resolve those dilemmas appropriately (Rest and Narvaez 1994). Conceptualizations of auditor expertise should therefore consider both technical and ethical dimensions.

The early literature on auditor expertise focused primarily on technical knowledge as the determinant of auditor expertise (Shelton 1999; Libby and Luft 1993; Tubbs 1992; Choo and Trotman 1991; Frederick 1991; Bonner 1990; Bonner and Lewis 1990). More recently, an effort is underway to broaden the concept of

auditor expertise by incorporating dimensions of expertise other than technical knowledge such as tacit managerial knowledge (Tan and Libby 1997), interpersonal perception (Tan and Jamal 2006, 2001; Jamal and Tan 2001) and accountability (Gibbins et al 2001; Gibbins and Newton 1994). Sensitivity to stakeholders has been labeled ethical sensitivity in some models of ethical judgment (Jones 1991; Rest 1984). An expanded conceptualization of auditor expertise would reflect the ethical nature of auditors' judgments by extending the stakeholder sensitivity dimension of expertise to include ethical sensitivity.

Although ethical responsibility was identified as a component of professional judgment, significantly more research has focused on auditors' technical knowledge (Shelton 1999; Libby and Luft 1993; Tubbs 1992; Choo and Trotman 1991; Frederick 1991; Bonner 1990; Bonner and Lewis 1990) than on auditors' ethical judgment (see Jones et al (2003) for a review). The majority of the research on auditors' ethical judgment used Rest's (1984) deontological model of ethical judgment as the framework for investigation (Jones et al 2003). Rest (1986) depicted ethical judgment as a four component process. One component, ethical sensitivity, is particularly salient to the auditing environment by virtue of the multiple stakeholders who have potentially conflicting interests and thus is a focus of this study.

Rest (1984) conceptualized ethical sensitivity as a process that includes the recognition of affected stakeholders, a sensitivity to their interests, intentions and expectations and an awareness of the various potential outcome consequences to stakeholders. In an examination of auditors' ethical sensitivity, the contextual

factors outcome and intentionality are germane to the investigation for two reasons. 1) Rest's (1986) conceptualization of ethical sensitivity converges with auditing standards and the law which both emphasize intentionality and a process orientation. 2) In contrast, the behavioral research in the psychology and auditing literatures does not support those contentions. Individuals have difficulty assessing the intentions, the preferences and the knowledge of others and consequently their inclusion in the judgment process is not assured. Further, the effect of outcome at the exclusion of process on auditor judgment is robust.

2.2 The Ethical Nature of the Auditing Environment

Auditors are faced with a large breadth of stakeholders including shareholders, the investment community, creditors, customers, suppliers and the general public who rely on their judgment (Gibbins and Newton 1994; Ponemon and Gabhart 1994)[2]. Research in auditing on accountability (Gibbins and Newton 1994), on negotiation (Gibbins et al 2001) and on working paper review (Tan and Trotman 2003; Gibbins and Trotman 2002; Rich et al 1997) has modeled the multiple stakeholder nature of the auditing environment. Ethical dilemmas are inherent this environment because of the potential conflicts in serving multiple stakeholders with varying interests, welfare and expectations (e.g. see Gaa 1993; Mautz and Sharaf 1961). Although professional standards require an ethical

[2] This breadth of auditor responsibility is echoed in both stakeholder theory and contract theory. Stakeholder theory considers affected parties (i.e. stakeholders) by their legitimate interest in the corporation rather than simply by the corporation's interest in them (Donaldson & Preston 1995; Freeman 1984). The contract model of organizations characterizes those parties (i.e. employees, shareholders, customers, vendors, managers, creditors, managers, etc.) as agents who contract to contribute resources and for whom accounting helps to implement and enforce the contract (Sunder 1997).

responsibility to consider all affected and interested stakeholders in the discharge of professional responsibilities (*CICA Assurance Handbook Section* 5025; Mautz and Sharaf 1961), with recent audit failures such as Enron and WorldCom auditors have been characterized by Bazerman et. al. (1997) as placing precedence on the auditor-management relationship to the exclusion of other interested and affected stakeholders (i.e. shareholders, creditor, financial intermediaries, etc.). Auditors are ethically and professionally bound by Ethical Codes of Conduct to consider the potentially deleterious effects of an inappropriately issued qualified opinion on various stakeholders (e.g. Shaver 1985). "If he neglects any one of these or permits any one to get out of balance with the others he is failing in the appropriate discharge of his professional responsibilities" (Mautz & Sharaf 1961, p.237). In an environment in which ethical dilemmas are inherent, models of ethical judgment provide a framework for understanding auditors' judgment processes.

2.3 Ethical Judgment

2.3.1 Modeling Ethical Judgment

Early models of ethical judgment focused on ethical cognition as various sequential stages of ethical reasoning. Kohlberg (1969) advanced a stage-sequence model defined by a series of cognitive levels and stages. Kohlberg's (1969) three levels of ethical reasoning are reflected as different types of relationships between the self and society's rules and expectations: i) preconventional – rules and social expectations are something external to self; ii) conventional – identifies self in relation to others; and iii) post conventional – defines his or her values in terms of

self chosen principles (Ponemon 1992). Based on that stage-sequence model, Kohlberg (1969) and Rest (1979) developed the Moral Judgment Interview ("MJI") and the Defining Issues Test ("DIT") respectively to measure an individual's stage of ethical reasoning. With the advent of instruments like the MJI and the DIT to measure ethical reasoning, a plethora of research linking ethical reasoning to ethical judgment was conducted. In accounting, ethical reasoning was empirically linked to the disclosure of sensitive information (Arnold and Ponemon 1991), auditor independence (Ponemon and Gabhart 1990), dysfunctional audit behavior such as the underreporting of time on an audit time budget (Ponemon 1990) and sensitivity to management's characteristics such as integrity and competence (Ponemon 1993) (see Jones et al (2003) for a review).

Although the link between ethical reasoning and ethical judgment was empirically established, the link was not strong. Blasi (1980) and Rest (1986) agreed that various measures of ethical reasoning (e.g. DIT and MJI) are related to moral judgment however the magnitude of these relationships is not large[3]. Ethical reasoning explains only a part of an individual's ethical judgment. Ethical judgment is an exceedingly complex phenomenon and no single variable can sufficiently represent the cognition of ethical judgment; many other variables play an important role in ethical judgment (Rest 1984).

To explain the complexity of ethical judgment, several models of ethical judgment were proposed (Lampe and Finn 1992; Jones 1991; Dubinsky and Loken 1989; Trevino 1986; Hunt and Vitell 1986; Ferrell and Gresham 1985; Rest 1986).

[3] Specifically the reviews that provide a statistical summary estimate of the strength of the association between judgments and actions put the estimates somewhere in the range of 10% to 15%.

Ethical judgment research in accounting has been strongly influenced by Rest's (1984) model. Rest (1984) theorized that ethical behavior is comprised of four distinct but interrelated psychological components: i) ethical sensitivity – the interpretation of the situation through understanding various actions and the awareness of how those actions affect others; ii) ethical reasoning – which line of action is more ethically justifiable; iii) ethical intention – importance given to ethical values in connection with other options; and iv) ethical character – traits such as courage, persistence and implementation skills to follow through on intentions. Rest (1984) argued that each component in the process of ethical judgment is conceptually distinct and that success in one component does not imply success in any other component. Failure in any one of the four processes results in a moral failure therefore ethical judgment is a result of the culmination of all four processes. Most of the research on auditor ethical judgment has focused on the ethical reasoning component of ethical judgment (see Jones, et al 2003 for a review) due in large part to the development of a well validated instrument to measure ethical reasoning (i.e. Rest's (1979) DIT). Very little research has investigated auditors' ethical sensitivity (Karcher 1996; Cohen et al 1995; Shaub et al 1993). This study's investigation of ethical judgment focused, in part, on the process labeled ethical sensitivity.

2.3.2 Ethical Sensitivity

Human judgment and decision making processes are activated by the presence of a problem that requires some form of action (Bazerman et al 1997);

ethical judgment and decision making is no exception. Recognition of the ethical dimension of a problem activates the ethical judgment process (Jones 1991; Rest 1984). Models of ethical judgment and decision making, including Rest's (1984) model, explicitly include recognition of an ethical dimension as the first element in the cognition of ethical judgment (Jones 1991; Dubinsky and Loken 1989; Hunt and Vitel 1986; Rest 1984). The inability to recognize ethical dimensions is the most common reason individuals behave unethically (Jones 1991; Rest 1984). In his four-component model, Rest (1984) labeled recognition of the ethical dimension of a dilemma ethical sensitivity. Ethical sensitivity involves "making some sort of interpretation of the particular situation in terms of what actions are possible, who would be affected by each course of action and how the interested parties would regard such effect on their welfare" (Rest 1986, p. 3). Imagining and tracing the consequences of judgment in terms of how each judgment would affect the welfare of all parties involved is a complex psychological process (Rest 1986). Ethical sensitivity does not require explicitly labeling the situation as an ethical one. It is a basic awareness of how an individual's actions could affect other's welfare (Rest 1994, 1986). Rest (1986) did not consider it necessary or inevitable that a person recognizes that the problem is an ethical problem but minimally realizes that he could do something that would affect the interests, welfare or expectations of others. In an auditing context, sensitivity to the multitude of stakeholders who may be affected by an auditor's judgment is a necessary precondition to their inclusion and consideration in the ethical judgment processes (Rest 1986).

2.4 Auditor Expertise: An Evolving Concept

Ethical dilemmas (e.g. conflicts of interest, independence issues and alteration of financial information (Finn et al 1988)) are usually a mix of technical and ethical issues and professionals must have both technical and ethical expertise to resolve those dilemmas appropriately (Rest and Narvaez 1994). There is a very large "expertise" literature examining the technical competence of professional accountants, however there has been remarkably less study of the ethical judgment of auditors. Conceptualizations of auditor expertise should incorporate both technical and ethical dimensions.

Expertise in the auditing literature has been conceptualized in terms of auditors' technical knowledge (Bonner 1990; Bonner and Lewis 1990). A key finding of that literature was that auditors become more technically competent as they gain general auditing experience and instruction (Bonner 1990; Bonner and Lewis 1990) and undertake further education and specialization (Ponemon 1992; Bonner and Lewis 1990). Early auditor expertise research (Libby and Tan 1994; Libby and Luft 1993; Bonner and Lewis 1990; Libby 1983) focused on an expertise framework that was based primarily on research in psychology (Einhorn and Hogarth 1980). Auditor performance was modeled by measures of ability, experience, knowledge (Bonner and Lewis 1990) and motivation (Libby and Tan 1994; Libby and Luft 1993; Libby 1983). Various attempts were also made to build expert systems based on detailed protocol studies of expert auditors' thought processes (e.g., Johnson et al. 1993, 1992; Bedard and Biggs 1991).

Libby and Tan (1994) employed Libby and Luft's (1993) expertise framework to model the relationships among ability, experience, knowledge and motivation by classifying tasks according to their degree of structure and the characteristics of their environment. Within this expertise framework, the role of knowledge on performance was investigated more frequently than the roles of ability, environment and motivation. Research into the nature of auditor expertise was primarily concerned with the knowledge expert auditors possess (Bedard and Biggs 1991; Bonner 1990; Bonner and Lewis 1990), the representations of that knowledge in memory (Shelton 1999; Nelson et al 1995; Ramsay 1994; Tubbs 1992; Choo and Trotman 1991; Libby and Frederick 1990; Frederick and Libby 1986) and auditors' selection of decision strategy (Turner 2001; also see Bonner and Pennington 1991). A common finding from the research comparing experts and novices was that the superior performance of experts was due to their technical knowledge. That research however found only small differences in technical knowledge resulting from experience beyond the senior staff level (Bonner and Lewis 1990; Libby and Frederick 1990). Technical knowledge thus does not completely or adequately explain expert performance and appears to be only a subset of the knowledge necessary for expertise (Tan and Libby 1997). Research on the attributes of experts in auditing further suggests that technical knowledge, although essential, is only one attribute of many which distinguishes experts in auditing from novices (Abdolmohammadi et al 2004; Abdolmohammadi and Shanteau 1992).

A broadening concept of auditor expertise, which included other dimensions of expertise, was explored in the auditing literature. Tan & Libby (1997) investigated the managerial components of knowledge, together with technical knowledge and problem solving skills. Similar to prior research on expertise (e.g. Bonner and Lewis 1990), Tan and Libby (1997) found that outstanding senior staff accountants have more technical knowledge than average senior staff accountants however both outstanding and average managers possessed relatively high levels of general technical knowledge. The technical nature of staff-level work suggests that staff auditors should be distinguished by their technical knowledge. Experienced managers with superior performance evaluations were distinguished by their tacit managerial knowledge – knowledge about managing self, managing others and managing career (Wagner & Sternberg 1985) however, outstanding and average senior staff exhibit no differences in their tacit managerial knowledge. Tan and Libby's (1997) results demonstrated that an interpersonal dimension of expertise, tacit managerial knowledge, becomes more important than technical competence as auditors become more expert.

A concept of expertise broader than technical competency is espoused by popular theories of expertise in the psychology literature. Gardener's (1999, 1985) theory of multiple intelligences, Goleman's (1998, 1995) emotional intelligence and Wagner and Sternberg's (1985) tacit managerial knowledge all conceptualize a broader concept of expertise than technical knowledge. One commonality among these general theories is the consideration of an interpersonal dimension of expertise. Deficiencies in interpersonal dimensions of expertise can hinder the use

of whatever technical expertise a professional (e.g. an auditor) may possess (Goleman 1998).

Research in auditing has demonstrated various interpersonal dimensions of auditor expertise. Expert auditors assessed their subordinates' technical knowledge better than did other auditors (Kennedy and Peecher 1997), assessed their subordinate's work more objectively (Tan and Jamal 2001), were more objective in their evaluations of other auditors' judgments (Ponemon 1995), were better able to predict choices of their subordinates in high ambiguity tasks (Jamal and Tan 2001), detected more conclusion errors with increasing stylization by their subordinates in working paper reviews (Tan and Trotman 2003), were less susceptible to the bias of potential business opportunities with an audit client (Moreno and Bhattacharjee 2003) and exhibited an enhanced metaperception of how other auditors viewed other auditors' technical competence (Tan and Jamal 2006). Sensitivity to subordinates, superiors, other auditors, peers and management has been examined as a broadening of the conceptualization of auditor expertise. A further broadening of stakeholder sensitivities to include a broader scope of stakeholders expands the conceptualization of auditor expertise and acknowledges an ethical dimension of professional judgment (Mautz and Sharaf 1961).

2.5 Ethical Judgment: Management's Intentions and Outcome

2.5.1 Introduction

Rest (1984) modeled ethical judgment as a four component process. Ethical sensitivity, one of the four psychological processes that culminate in ethical

judgment, is conceptualized as a process that includes the recognition of affected stakeholders, a sensitivity to their interests, intentions and expectations and an awareness of the consequences to stakeholders of various potential outcomes. In an examination of auditors' ethical sensitivity and ethical judgments, outcome and management intentionality are germane to that investigation. Rest's (1984) model of ethical judgment converges with auditing standards (*CICA Assurance Handbook* Section 5095) and the law which collectively emphasize both the assessment of management's intentions and a process orientation in arriving at auditor judgment. In contrast, the behavioral research in psychology and auditing does not support an effectual assessment of stakeholders' intentions or a process orientation in making an ethical judgment. Individuals have difficulty assessing intentions, preferences and knowledge of others (Jamal and Tan 2001; Kennedy and Peecher 1997; Fussell and Krauss 1992; Ross et al 1977). Further, the effect of outcome at the exclusion of process on auditor's judgment processes and judgment itself is robust (Kadous, 2000; Kinney and Nelson 1996; Lipe 1993; Brown and Solomon 1993). The disregard of stakeholders' interests and a focus on outcome instead of process maybe a result of psychological tendencies that foster biases in auditors' judgments (Bazerman et al 1997). This study examined the conflict between Rest's (1986) model of ethical judgment and the psychology and auditing literatures in the context of a broadening conceptualization of auditor expertise.

2.5.2 Ethical Judgment and Management's Intentions

In the context of auditing, the ability to judge the interests, intentions and expectations of management is an important characteristic of auditors' professional skepticism (Jones, Massey and Thorne 2003). Audit failure may occur whenever the auditor incorrectly perceives the financial reporting intentions of management. Effective auditing practice means that auditors are sensitive to the intentions of management with regard to the concealment of fraud, distorted financial records and/or illegal acts (*CICA Assurance Handbook* Section 5095; Ponemon and Gabhart 1994).

Rest's (1984) conceptualization of ethical sensitivity and ethical judgment makes explicit the assessment of the interests, intentions and expectations of affected parties which in auditing are the various stakeholders to whom auditors owe a professional responsibility including management. The *CICA Assurance Handbook* Section 5095, "Reasonable Assurance and Audit Risk", requires the assessment of inherent risk. Inherent risk is a measure of auditors' assessments of the likelihood that a material misstatement (intentional or unintentional) might occur. That assessment of inherent risk explicitly requires the consideration of several factors including the nature of the business, the integrity of management and management's intentions (*CICA Assurance Handbook* Section 5095; Arens et al 2007). Consistent with auditing standards and the law, understanding the interests, intentions and expectations of management is expected in auditing. An ethical sensitivity to ethical issues translates into auditors' ability to gauge the intentions of others more precisely and more objectively (Reeder and Covert 1986; Rest 1986).

Because audit procedures designed to detect unintentional misstatements may not be effective at detecting intentional misstatements auditors are required to assess risk of intentional misstatements. CICA Assurance Handbook Section 5135 requires the auditor to explicitly evaluate and document the risk of fraud on every audit engagement to provide reasonable assurance that material misstatements have been detected (see Arens et al 2007). Management's concealment of fraud, distortion of financial records and/or illegal acts are however difficult to uncover because of the intentional deception (Lowe et al 2002). A large literature in psychology (Fussell and Krauss 1992; Ross et al 1977) and auditing (Jamal and Tan 2001; Kennedy and Peecher 1997) indicates that most people (including auditors) have great difficulty in assessing the knowledge, preferences, actions and intentions of other people (see also Tan and Jamal 2006). However, despite the difficulty of ascertaining intentions, Rest's (1984) conceptualization of ethical sensitivity and judgment and auditing standards (*CICA Assurance Handbook* Section 5095) both expect auditors to be sensitive to management's intentions and further to detect misstatements.

2.5.3 Ethical Judgment and Outcome

In the conduct of an assurance engagement, auditors are required to follow Generally Accepted Auditing Standards. Those standards (i.e. GAAS) have been codified in the *CICA Assurance Handbook* and emphasize the need to follow a proper audit process. The process orientation of auditing standards is further evident in the review standards of the Public Company Accounting Oversight Board

(PCAOB – see www.pcaobus.org). The PCAOB was created as part of the reforms enacted by passage of the *Sarbanes-Oxley Act (2002) by the U.S. Congress.* In Canada, the Canadian Securities Administrators (CSA) and the Canadian Institute of Chartered Accountants (CICA) jointly set up the Canadian Public Accountability Board (CPAB). CPAB has also adopted a process oriented definition of audit quality (www.cpab-ccrc.ca). Rest's (1984) model of ethical judgment[4], like auditing standards, is process-oriented. In fact, each of the four components of Rest's (1984) model is depicted as an individual process. An emphasis on process however is not consistently supported by the behavioral research in the psychology and auditing literatures.

Knowledge of outcome information has been shown to affect the processes that culminate in judgment and ultimately the judgment itself (Baron and Hershey 1988). Individuals evaluate judgments resulting in unfavorable outcomes as being of significantly lower quality than judgments that resulted in favorable outcomes regardless of the actual appropriateness of the process resulting in the outcome. This phenomenon is called an outcome effect[5]. Results from research on the outcome effect demonstrate the robustness of the effect on judgment across various subjects and tasks (Kennedy 1995).

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[4] Rest's (1984) model is deontological in it's perspective. Deontological models focus on the specific actions or behaviors of the decision maker (i.e. process). In contrast to Rest's (1984) model, utilitarian models of ethical judgment focus on the outcome consequences.

[5] Previous research has distinguished between outcome and hindsight effects on the basis of the study's task and dependent variable. When the task is a probability assessment and the dependent variable is the difference between probability judgments assessed in the presence and absence of outcome information, it is said to be a hindsight study. On the other hand when the task is decision/performance appraisal and the dependent variable is the difference between such appraisals in the presence and absence of outcome information, it is said to be an outcome effect study (Brown and Solomon 1993).

Inevitably, situations will arise where an auditor will fail to detect a management fraud or an unintentional material error in a company's financial statements. In such circumstances, litigation is a possible consequence for auditors. There are two formal mechanisms to deal with audit failure: the judicial system and the profession's peer review process. In both the judicial system and the profession's peer review process, the standard of care requires that auditors be evaluated based on the level of audit quality provided not on the outcome (Kadous 2000; Causey and Causey 1991). Auditor liability however is determined from a perspective that includes outcome knowledge (Kennedy 1995). Although outcome information should have no incremental effect on evaluations (Baron and Hershey 1988), reliance on outcome information is problematic in auditor negligence trials and peer reviews as outcome knowledge can potentially restrict the evaluator's ability to objectively evaluate auditors' recognition of stakeholder considerations and judgment retrospectively (Lowe and Reckers 1994). If the actual outcome is considered, then performing a high quality audit may not protect the auditor from liability (Kadous 2000). Research investigating the impact of outcome knowledge on decision making in an auditing environment produced similar results (Kadous, 2000; Kinney and Nelson 1996; Lipe 1993; Brown and Solomon 1993). That research investigated the pervasiveness of the outcome effect across various tasks (Kadous 2000; Kennedy 1995; Lipe 1993; Brown and Solomon 1993; Anderson et al 1993; Reimers and Butler 1992) and between various subject types (Kinney and Nelson 1996; Anderson et al 1993), the cognitive explanations for the outcome effect (Kadous 2000; Lipe, 1993; Brown and Solomon, 1993) and the effectiveness

of mitigating strategies (Emby and Etherington 1996; Anderson et al 1997; Kennedy 1995). Research on the outcome effect in an auditor liability context demonstrates that jurors (Clarkson et al 2002; Kadous 2001; Kadous 2000; Lowe and Reckers 1994), judges (Anderson et al 1997) and auditors (Emby et al 2002; Kinney and Nelson 1996; Ponemon 1995) are similarly impacted by outcome information. Although auditors are both more knowledgeable about the audit setting and more motivated to avoid auditor responsibility for unfavorable outcomes, they demonstrated the same vulnerability to outcome information as non-auditors (Kinney and Nelson 1996).

The audit profession has an elaborate practice review and professional discipline process for explaining, understanding and disciplining audit failure. Regulators and other interested parties rely on audit partners' evaluations of their peers because evaluations of auditor liability are complex as the standard of care is subject to interpretation (Kadous 2000). Persistence of an outcome effect in the profession's self-regulation processes may have deleterious consequences for a profession in which process, not outcome, should determine assessments of audit quality. Auditors may be biased by outcome in the processes that generate judgment (e.g. Rest 1984) including in their recognition of stakeholder considerations and ultimately in their judgments. Although the effect of outcome is robust and debiasing strategies to eliminate the effect are generally ineffective and often impractical, experts who have exhibited a lesser susceptibility to other biases in prior research may also demonstrate a lesser susceptibility to the outcome effect. If experts are less affected by the outcome effect, the lack of effective debiasing

strategy to reduce the outcome effect may be overcome by the use of expert auditors to provide evaluative judgments of other auditors.

3 HYPOTHESES DEVELOPMENT

3.1 INTRODUCTION

Understanding the effect of contextual factors like outcome and management's intentions on expertise and auditor judgment in an ethical dilemma enhances our understanding of auditor judgment. The effect of outcome consequences is particularly germane to auditors as auditing standards (Kadous 2001, 2000), like the law, and Rest's (1984) model of ethical judgment, are primarily process-oriented not outcome-oriented. Further, auditors make decisions from an *ex ante* position relative to an outcome however performance is evaluated *ex post* because of an event outcome (Kennedy 1995). Effective auditing requires an emphasis on the process not on the outcome. Research in psychology (see Christensen-Szalanski and Willham (1991) for a review) and auditing (Kinney and Nelson 1996; Kennedy 1995; Lowe and Reckers 1994) however has shown that people, generally, and auditors, more specifically to this study, have difficulty ignoring outcome information. That outcome effect is asymmetric in its impact on judgment processes like ethical sensitivity and ethical judgment. Prior research has found very little evidence of a positive outcome effect but has found a very robust negative outcome effect (Emby et al 2002; Anderson et al 1997; Fiske and Taylor 1984). The nature of the outcome effect compelled development of the hypotheses on auditor expertise and ethical judgment by the type of outcome consequences. The

hypotheses on auditor expertise and ethical judgment developed in this study were organized based on the outcome consequences both favorable (i.e. positive) and unfavorable (i.e. negative) following auditors' judgments.

3.2 Hypotheses on Favorable Outcomes

Prior research on the effect of outcome on ethical judgment suggests that knowledge of outcome affects the evaluation of a judgment's ethicality (Barnett & Valentine 2004; Karcher 1996; Jones 1991); that research has found however very little evidence of a positive outcome effect (Emby et al 2002; Anderson et al 1997). A positive or favorable effect is defined as client continuance with no auditor litigation (Anderson et al 1993) and is arguably the typical outcome in the auditing environment. This study developed hypotheses about both a broader sensitivity to stakeholders (i.e. ethical sensitivity) and judgment as dimensions of expertise when a typical audit outcome occurs; that is when the outcome effect is benign from both management's and the auditors' perspectives.

A sensitivity to stakeholder interests, welfare and expectations is a professional responsibility (Gaa and Ponemon 1997). Prior research in auditing has empirically demonstrated that a sensitivity to stakeholders such as management and other auditors is a dimension of auditor expertise (Moreno and Bhattacharjee 2003; Tan and Trotman 2003; Jamal and Tan 2001; Tan and Jamal 2001; Kennedy and Peecher 1997; Tan and Libby 1997; Ponemon 1995). Broadening the scope of stakeholder sensitivity beyond management and other auditors extends the current conceptualization of auditor expertise and acknowledges both the multiple

stakeholder nature of the auditing environment and an ethical dimension of audit judgment (Mautz and Sharaf 1961).

Only one prior study specifically attempted to investigate the relationship between expertise and ethical sensitivity. Karcher (1996) studied the effect of various variables (e.g. age, experience, exposure) on auditors' ethical sensitivity[6]. Her results suggested that expertise did not affect auditors' ethical sensitivity. In her study, Karcher (1996) used two separate measures of expertise which both addressed the participants' general technical knowledge as a proxy of expertise. Technical expertise is however not well correlated with expertise beyond the rank of senior (Tan and Libby 1997). Karcher's (1996) findings more aptly suggested that ethical sensitivity is not correlated with technical knowledge. By broadening the conceptualization of auditor expertise to include stakeholder sensitivities, this study investigated a broader sensitivity to stakeholders, ethical sensitivity, as a dimension of expertise. The first hypothesis (in alternate form) is:

H1: When outcome consequences are favorable, expert auditors are more ethically sensitive than are novice auditors.

Ethical sensitivity is defined minimally as the recognition of affected stakeholders however its conceptualization also entails ascertaining the interests, intentions and expectations of those stakeholders. Auditing standards require auditors to be sensitive to management's intentions (*CICA Assurance Handbook* Section 5095) and provide for differing degrees of assurance in the assessment of a misstatement from fraudulent intentions as is provided for unintentional errors

[6] Karcher's (1996) definition of ethical sensitivity was recognition of an ethical issue. In this study, ethical sensitivity is operationalized in terms of stakeholder identification.

(*CICA Assurance Handbook* Section 5135; Arens et al 2007; Epstein and Geiger 1994). An audit failure may occur if auditors' do not correctly assess management's intentions as a result of the deception of management. An expectation gap exists between the auditors' responsibility to detect fraud and the stakeholders' expectations concerning the detection of management fraud (Kadous 2000; Kinney and Nelson 1996).

A deeper ethical sensitivity translates into auditors' abilities to gauge the ethical intentions of others more precisely and objectively (Reeder and Covert 1986; Rest 1986). Prior research studied the relationship between auditors' level of ethical reasoning, the second component in Rest's (1984) model of ethical judgment (which has been linked to expertise (Ponemon 1995, Gaa 1993)), and sensitivity to management's intentions. Ponemon (1993) demonstrated that audit managers and audit seniors with higher levels of ethical reasoning were more sensitive to management's competence and integrity characteristics than were managers and seniors with lower levels of ethical reasoning. Bernardi (1994) found that managers' abilities to detect fraud were moderated by their level of ethical reasoning. If ethical reasoning, a component of ethical judgment, is a dimension of auditor expertise as Ponemon (1995) and Gaa (1993) suggest, then an ethical sensitivity to management's intentions may also be a dimension of expertise. Given the expectation gap concerning detection of deliberately deceptive management behavior, auditors may be more sensitive to stakeholders when management's intentions are deliberately misleading than when they are not deliberately

misleading. Hypothesis Two (in alternate form) separated by the effect of management's intentions is:

H2a: When outcome consequences are favorable and management's intentions are inadvertently misleading, expert auditors are more ethically sensitive than are novice auditors.

H2b: When outcome consequences are favorable and management's intentions are deliberately misleading, expert auditors are not more ethically sensitive than are novice auditors.

A sensitivity to stakeholders including management affects ethical sensitivity and ultimately overall judgment. Prior research in auditing focused primarily on judges and jurors in the audit review process (Clarkson et al 2002; Kadous 2001; Kadous 2000; Anderson et al 1997; Lowe and Reckers 1994). Unlike jurors and even judges, auditors are knowledgeable about the auditing setting and audit standards. Emby et al (2002) concluded that even auditors in a familiar domain are influenced by outcome knowledge. Prior research has demonstrated that experts' judgments differ from novices' judgments on various tasks (Jamal and Tan 2001; Kennedy and Peecher 1997; Tan and Libby 1997; Emby and Gibbins 1989) including judgments which involve an ethical dilemma (Ponemon 1995). Experts therefore would likely assess the appropriateness of judgments differently than novices. Hypothesis three (in alternate form) is:

H3: When outcome consequences are favorable, expert auditors' assessments of the appropriateness of other auditors' judgments differ from the assessments by novice auditors.

Previous studies have investigated the effect of outcome on jurors, judges and auditors' evaluative judgments (Emby and Lowe 2002; Kennedy and Peecher 1996; Kennedy 1995) but none have addressed the issue of sanctions (i.e. penalties levied through professional practice review) against auditors in a peer review context[7]. The outcome of both the litigation and the peer review processes is the evaluation of auditor's judgment and the assessment of possible damages or sanctions against the auditor. Although a number of studies have studied the evaluative judgments of auditors in both litigation (Kadous 2001; Anderson et al 1997; Kinney and Nelson 1996; Lowe and Reckers 1994) and peer review contexts (Emby et al 2002; Kinney and Nelson 1996), none have examined the sanctions assessed by an auditor against another auditor. Although auditors make decisions without knowledge of the outcome, auditor liability is determined from a perspective that includes outcome knowledge. Experts have been shown to be more objective in their judgment processes (Tan and Jamal 2006; Jamal and Tan 2001; Kennedy and Peecher 1997; Ponemon 1995) and therefore their assessment of sanctions against an auditor as part of the peer review process may differ from novices' assessments. No prior study has examined the impact of expertise on the assessment of sanctions against the auditor. Hypothesis Four (in alternate form) is:

H4: When outcome consequences are favorable, expert auditors' assessments of sanctions against other auditors differ from novice auditors' assessments.

[7]In the auditing literature penalties have been assessed by both Lowe et al (2002) and Ponemon (1992). Lowe et al's (2002) participants were jurors not auditors who were asked to assess the damage awards against an auditor. Ponemon's (1995) participants were litigation specialists asked to assess damages as an expert witness on a legal case.

3.3 Hypotheses on Unfavorable Outcomes

Auditing standards, like the law, indicate that auditors should be evaluated according to the level of audit quality they provide (Kadous 2000; Causey and Causey 1991) not on the outcome. In fact, the PCAOB in the U.S. and the CPAB in Canada both use a process oriented definition of audit quality to conduct regular inspections of audit firms. The judicial system is designed on a negligence basis, that is, an unfavorable outcome does not automatically prove fault (Anderson et al 1997). Evaluations of auditor judgment are complex. As a result, regulators and other interested parties rely significantly upon auditors' evaluations of their peers. An auditor may therefore be placed in the position of evaluating the judgment of another auditor both in the judicial system as an expert witness, or more often in a peer review context as a practice reviewer. Research in psychology (see Christensen-Szalanski and Willham (1991) for a review) and auditing (Kinney and Nelson 1996; Kennedy 1995; Lowe and Reckers 1994) however has shown that people, generally, and auditors, more specifically to this study, have difficulty ignoring outcome information. The effect of outcome knowledge on auditors' ethical judgments could be problematic in both litigation and peer review contexts. Unfavorable outcome knowledge in both litigation and a peer review context may have a deleterious effect on auditors' objectives and evaluations.

Prior research on the effect of outcome on ethical judgment suggests that knowledge of the outcome affects the evaluation of a judgment's ethicality (Barnett & Valentine 2004; Karcher 1996; Jones 1991). Judgments that result in unfavorable outcomes are evaluated as less ethical than judgments resulting in favorable

outcomes (Barnett & Valentine, 2004; Jones 1991). Knowledge of the outcome directs attention toward the outcome, causing the outcome to be particularly salient in the formation of mental representations (Fiske and Taylor 1984; Nisbett and Ross 1980; Rothbart et al 1978). One explanation for the effect of outcome on ethical sensitivity is that ethical issues perceived as having unfavorable consequences are more salient (Barnett & Valentine 2004; Karcher 1996; Jones 1991). Judgments that yield unfavorable outcomes will cause individuals to attend to stakeholders and the consequences of an unfavorable outcome more readily (Jones 1991).

Prior research has not examined the effect of outcome on experts as compared to novices[8]. Ponemon (1995) studied the bias in auditor judgments and the impact of the level of ethical reasoning on judgments of auditors who practice litigation support services. His results demonstrated that accountants generally favored their client's economic interests however professional accountants with high levels of ethical reasoning (as measured by DIT (Rest 1979) scores) were less biased in their evaluations. Based on those results, Ponemon (1995) proposed higher levels of ethical reasoning support a moral expertise paradigm (Gaa 1993). Although prior research has demonstrated that expert auditors are less susceptible to biases in their judgments (Jamal and Tan 2001; Tan and Jamal 2001; Kinney and Peecher 1997; Ponemon 1994), the robust nature of the bias created by the outcome effect may negate experts' lesser susceptibility to biases. Further, no study has examined if the bias of the knowledge of the outcome affects expert auditors'

[8] Kinney and Nelson (1996) investigated the ex ante judgments of auditors and the ex post judgments of nonauditors but did not categorize participants as novice and expert auditors.

ethical sensitivity differently than that of novice auditors. Hypothesis five (in alternate form) is:

H5: When outcome consequences are unfavorable, expert auditors are not more ethically sensitive than are novice auditors.

Management's intentions and their potential impact on stakeholders' interests, welfare and expectations matter in auditing. Auditing standards require auditors to be sensitive to management's intentions (*CICA Assurance Handbook* Section 5095) and provide for differing audit risk procedures in the assessment of misstatements from fraudulent intentions as is provided for unintentional misstatements (*CICA Assurance Handbook* Section 5135; Arens et al 2007; Epstein and Geiger 1994). An audit failure may occur if the auditor does not correctly assess management's intentions as a result of the deception of management. When the outcome is unfavorable the saliency of managements' intentions are heightened for both novices and experts. Hypothesis six (in alternate form) separated by the effect of management's intentions is:

H6a: When outcome consequences are unfavorable and management's intentions are inadvertently misleading, expert auditors are not more ethically sensitive than are novice auditors.

H6b: When outcome consequences are unfavorable and management's intentions are deliberately misleading, expert auditors are not more ethically sensitive than are novice auditors.

Knowledge of an unfavorable outcome causes a pervasive bias in the judgment processes of auditors. Prior research has demonstrated that auditors with knowledge of a negative outcome provided significantly lower evaluations of the

appropriateness of an auditor's decision than auditors receiving a positive outcome (Anderson et al 1997). In a study of auditors in a peer review context, Emby et al (2002) demonstrated that auditors' evaluations of the decision to issue an unqualified option were significantly lower if the outcome was unfavorable than if the outcome was favorable. Emby et al (2002) and Kinney and Nelson (1996) concluded that even auditors in a familiar domain are influenced by knowledge of the outcome. The robustness of the outcome effect is further evidenced by the ineffectiveness of debiasing strategies (Kadous 2000; Anderson et al 1997). Although research has demonstrated that expert auditors are less susceptible to biases in their judgment processes (Jamal and Tan 2001; Tan and Jamal 2001; Kennedy and Peecher 1997; Ponemon 1994) none have investigated if the bias of outcome knowledge differs for experts and novices in an auditing environment or affects the evaluation of an auditor's judgment of an ethical dilemma. The robust nature of the outcome effect may negate experts' lesser susceptibility. Hypothesis Seven (in alternate form) is:

H7: When outcome consequences are unfavorable, expert auditors' assessments of the appropriateness of other auditors' judgments do not differ from the assessments by novice auditors.

One outcome from the peer review process is the determination of possible sanctions against the auditor whose judgment is being evaluated. Although a number of studies have evaluated the judgment of auditors in both litigation (Kadous 2001; Anderson et al 1997; Kinney and Nelson 1996; Lowe and Reckers 1994) and peer review contexts (Emby et al 2002; Kinney and Nelson 1996), none have examined the sanctions assessed by auditors in auditor liability evaluations.

Research has demonstrated a robust bias related to the knowledge of outcome and auditors in a familiar domain are influenced by knowledge of an unfavorable outcome. If auditors' evaluative judgments are affected by the knowledge of outcome such that more unfavorable outcomes result in less favorable evaluations, the sanctions levied against an auditor based on that evaluative judgment will also be biased by outcome. Although experts have demonstrated less susceptibility to biases than novices, experts may be as susceptible to the effect of outcome due to the robust nature of the outcome effect when outcomes are unfavorable. Hypothesis Eight (in alternate form) is:

H8: When outcome consequences are unfavorable, expert auditors' assessments of sanctions against other auditors do not differ from novice auditors' assessments.

4 EXPERIMENTAL DESIGN AND METHOD

4.1 EXPERIMENTAL DESIGN

This study employed a 2 (intentions) X 2 (outcome) X 2 (expertise) between-subjects experiment to investigate both ethical sensitivity and ethical judgment as a dimension of auditor expertise. The factor expertise had two levels – expert and novice. Expertise was operationalized by the firm's evaluation (outstanding and average). In order to explore other possible operationalizations of the expertise construct, participants also completed a DIT test and were asked their rank (senior and manager).

The factor intentions had two levels – deliberate and inadvertent. In the deliberate condition, the deliberate action was the overpricing of assets sold to one client by another client of the audit firm, which contravened a contract between the two clients. In the inadvertent condition an impropriety occurred due to normal business circumstances. Normal business circumstances resulted in the overpricing of an asset due to a drastic and unexpected drop in the global market price of that asset. In both the deliberate and inadvertent manipulations, the impact on asset valuation and pricing was material and was of the same magnitude. The factor outcome also had two levels – unfavorable consequences and favorable consequences - consistent with Kadous (2000) and Kennedy and Peecher (1997). Outcome was manipulated by varying the consequences following an audit decision. In the unfavorable consequences condition, participants were presented with

outcome consequences that resulted in a client's bankruptcy and a lawsuit against the auditor. In the favorable consequences condition, the outcome resulted in the client's continuance in the normal course of its business and no auditor litigation.

In prior studies, the construct expertise has been operationalized by various measures including experience, rank, firm evaluation and level of ethical reasoning as measured by the DIT P-score. Prior research has demonstrated that experience (Tan and Libby 1997; Ramsay 1994), rank (Tan and Jamal 2006; Tan and Libby 1997) and the DIT's P-score (Schatzberg et al 2005; Ponemon 1993) are unreliable proxies of auditor expertise. In contrast, firm evaluation has been established as a consistent construct of expertise (Tan and Jamal 2000; Jamal and Tan 2000). Although various proxies of expertise were measured in this study for comparative purposes, firm evaluation was the proxy of expertise used in this study.

Manipulation check questions addressing management's intentions and the outcome manipulations were included in a post-experiment demographic questionnaire. To measure the effectiveness of the intentions manipulation, participants were asked to rate the intentions of the outcome consequences on a nine-point bipolar[9] Likert scale anchored with "Not at all fraudulent" and "Extremely fraudulent". To measure the effectiveness of the outcome manipulation, participants were asked to rate the adversity of the outcome consequences on a nine-point bipolar Likert scale anchored with "Not at all adverse" and "Extremely adverse". Firm evaluation was reported and confirmed by the contact partners responsible for the distribution and collection of experimental materials.

In each of the experimental conditions, participants were asked to read an

[9]The advantage of the bipolar scale is that it is sensitive to variations in judgments.

auditing case scenario, to identify and to rank the stakeholders whose interests should have been considered prior to the auditor making a decision, to make a judgment about the preferable course of action the auditor should have taken, to make an evaluative judgment about the appropriateness of the auditor's action, and to assess possible sanctions to be levied against the auditor. Additionally, participants were asked to complete both a post-experiment demographic questionnaire and an instrument used to measure the participant's ethical reasoning (i.e. DIT).

4.2 PARTICIPANTS

In total, 135 professional accountants participated in this study with 128[10] participants providing usable responses. Of the 128 participants, 63 (49.2%) participants were audit seniors and 65 (50.8%) participants were audit managers employed in one of seven offices of the Big 4 accounting firms (Toronto and Halifax offices) and two offices of a national firm (Toronto and Halifax offices). Each of the study's participants was selected by an audit partner who agreed to serve as the contact person from the participant's respective accounting firm. Each audit partner was asked to use the following two criteria to select participants: (1) select an equal number of audit managers and audit seniors and (2) partition these groups in half into outstanding (expert) and average (novice) performers according

[10] In total 135 participants returned study materials however seven were eliminated from the analysis for various reasons. Three instruments were returned in sealed envelopes with no responses. Two respondents failed to complete the instruments in their entirety and two respondents failed consistency checks on their DIT questionnaire. Requesting that the respondents return the completed study materials in sealed envelopes allowed for the confidentiality of their responses and also allowed participants to comply with the firm's contact partner request without facing possible negative reputational effects perceived or otherwise.

to the their firm's performance evaluation system[11]. Of the 128 participants, 66 (51.6%) were categorized as outstanding (expert) and 62 (49.2%) were categorized as average (novice) performers in their respective firms.

Participants' demographic information was collected in a post-experiment questionnaire. Table 1 reports the mean values and proportions of participant's age, gender, rank in the firm, firm evaluation, the number of years in the profession, the number of billable hours they charged last year and p-score. The demographics are reported by each of the four treatment conditions and in aggregate. The aggregate results report that the average age of the participants in the study was 29 years. There were 82 male participants (64.5%) and 46 female participants (35.5%). There is no statistical relationship between gender, age, billable hours and participants' responses to the experiment. The scales for measuring the independent variables were tested for skewness and kurtosis. Overall the distributions appeared reasonably normal.

------Insert Table 1-------

4.3 Dependent Variable: Ethical Sensitivity

In an auditing environment, auditors are accountable to multiple stakeholders (e.g. management, shareholders, suppliers, customers) who rely on auditors' judgments. The existence of these multiple stakeholders with potentially conflicting interests (Gaa and Ponemon 1997; Mautz and Sharaf 1961) makes the

[11] Audit seniors and managers are evaluated on a frequent basis and their annual evaluations are shared among partners or made in a group setting. The contact partners consider the auditors classified as "average" to make a positive contribution to the firm (i.e. their performance ratings are satisfactory). See Tan and Jamal (2001) for a similar approach to distinguishing outstanding (expert) and average (novice) performers.

identification of multiple stakeholders particularly salient in an auditing environment. In this study, the experimental instrument explicitly required participants to consider the various stakeholders affected by auditors' decision. Rest (1984) conceptualized ethical sensitivity as a complex process of identifying the parties who are affected by a decision and imagining how various actions would affect the welfare of those parties. Rest (1986) did not however consider it necessary or inevitable that a person recognizes that the problem is an ethical problem but minimally realizes that she/he could do something that would affect the interests, welfare or expectations of others.

Ethical sensitivity has been operationalized previously as a dichotomous variable - recognition of an ethical issue or not (Bone and Corey 2000; Sparks and Hunt 1998; Karcher 1996; Shaub et al. 1993; Herbert et al 1992, 1990). This study attempted to capture a dimension of ethical sensitivity not captured by prior research. Rest's (1984) conceptualization places an emphasis on the recognition of affected stakeholders and consequently this study's operationalization of ethical sensitivity focused on recognition of stakeholder types as a measure of ethical sensitivity. Ethical sensitivity was measured as the number of different stakeholder types the participants identified. Such a measure of ethical sensitivity is not an absolute measure of the dependent variable but a relative measure used to assess differences among the participants.

4.4 Dependent Variable: Ethical Judgment

Ethical sensitivity is one process in a four process model of ethical judgment developed by Rest (1984); those four processes culminate in ethical judgment. The experimental instrument contained two other dependent variables: (1) The instrument required the participants to rate the appropriateness of the auditor's decision to issue an unqualified audit report on a five-point Likert scale anchored at one end with "Very Appropriate" and at the other end with "Very Inappropriate". Further, the participants were asked to select an appropriate decision for the auditor in the experimental case scenario from a list of alternatives ranging from the issuance of an unqualified opinion to resignation from the audit(s) and to provide an assessment of what percentage of auditors participating in the study would select each of those alternatives. (2) Also, the participants were required to select sanctions against the auditor from a list of alternatives available to professional conduct committee members. The list of alternatives was adapted from both the Ontario and the Nova Scotia provincial institutes of Chartered Accountants' Codes of Conduct and ranged from exonerate (no penalty and no further action levied) to cancellation or resignation of designation (not able to practice as a Chartered Accountant).

4.5 Experimental Procedure

A contact partner in seven offices of the Big 4 accounting firms in Toronto and Halifax, and one partner of a national firm office in Toronto, were contacted and asked to participate in the study. All eight contact partners agreed to participate. Each contact partner was asked to select and distribute the experimental materials to

audit staff employed by their respective firms who met the participant criteria specified (see Section 4.2 for criteria). The contact partner was provided with the experimental materials for both distribution to and collection from the participants along with a consent form (Appendix A). The experimental material contained several components: a consent form (Appendix B), a case scenario[12] with accompanying questions (Appendix C), a demographic questionnaire (Appendix D), a short-form Defining Issues Test (Rest 1984) (Appendix E) and a form to allow participants to request the study's results (Appendix F). Once the contact partner collected the completed experimental materials, the materials were forwarded to the study's investigator. No contact was made between the investigator and the study's participants who were asked to return their responses and consent forms directly to the contact partner sealed separately in the envelopes provided.

All of the participants were required to read and sign a consent form (Appendix B) prior to commencing the study. The consent form invited the participants to take part in a study of professional judgment in auditing. Participants were promised that research protocol required to protect confidentiality and anonymity would be strictly adhered to; the procedures undertaken to protect confidentiality and anonymity were explained. All the participants were asked to return a signed copy of the consent form in a sealed envelope. No payment was made to participants and no explicit manipulation was made to induce accountability. Instead, endorsement of the study by the contact partner should have

[12] Other versions of the case scenario are identical except for minimal wording changes to include the independent variable manipulations of outcome and management intentions. The manipulations are discussed in Section 4.6 (Experimental Task) of this paper.

signaled the study's importance and consequently participants were expected to take the study seriously.

Prior to the distribution of the experimental materials to the firm contacts, the case scenario and accompanying materials were reviewed by two audit partners from two different offices of a Big 4 accounting firm. They assessed the experimental materials' readability, understandability and face validity. Their review yielded some minor changes to the experimental materials which were incorporated prior to a pretest. A pretest was conducted with two partners and two managers from one Big 4 accounting firm. That pretest further validated the instrument's readability, understandability and face validity.

4.6 Experimental Task

The experimental materials employed in this study made use of case scenarios containing an ethical dilemma based on actual legal cases involving auditors. The ethical dilemma involved a conflict between the confidentiality of one client and the welfare of another client. This conflict was employed because the ethical issue addressed in the case scenarios does not have a clearly defined resolution and could not be resolved by following the auditors' professional codes of conduct (Gaa and Ponemon 1997). Each participant received one case (Appendix C) that either involved a fraud based on Fund of Funds VS Arthur Andersen (1982) or a case with no fraud based on Consolidata VS Alexander Grant & Company (1981). In both cases, an event occurred at one audit client, Derrick Industrial Supplies ("DIS"), that had a bearing on a customer/business partner of DIS, Strathcona Water Works

Company ("SWW"). Due to the problem in one company (DIS), their business partner's (SWW) financial statements were materially misstated. The management of that business partner (SWW) was however not aware of the misstatement. Both companies have the same audit partner who by the nature of the audit relationship was aware of the material misstatement in the financial statements of SWW. Two outcomes were added to each case scenario such that in one version of the case, the problem became publicly known and resulted in the bankruptcy of SWW and legal action against the auditor (unfavorable consequences). In the other version, the problem was never discovered externally and there were no negative consequences to the auditor (favorable consequences).

The case scenario was accompanied by a number of tasks for which responses were requested from the participants. Following a reading of the case scenario, each participant was asked to identify and rank order each stakeholder whose interests should have been considered by the auditor of the company (DIS) who originated the overvaluation and by the auditor of their business partner (SWW). Space was provided for participants to identify up to ten separate affected stakeholders for each audit client (i.e. DIS and SWW). Further, each participant was also asked to indicate what the preferred auditor action would be for each stakeholder type identified.

Each case scenario provided the auditors' decisions (i.e. to issue an unqualified audit opinion for both companies) and participants were asked to make several judgments regarding those decisions. Firstly, the participants were asked to rate the appropriateness of the auditor's decision to issue an unqualified opinion on a 5 point

scale[13] anchored at one end with "Very Appropriate" and at the other end with "Very Inappropriate" for each audit client. Secondly, participants were asked to indicate their confidence out of 100% in their own judgment of appropriateness for each audit client. Thirdly, the participants were asked to indicate from lists provided the preferred auditor decision for both companies (i.e. DIS and SWW) in the case scenario. Fourthly, the participants were asked to predict what percentage of other participants would select each option as the most appropriate auditor decision. Finally, the participants were required to act as a practice reviewer for a Provincial Institute of Chartered Accountants assuming that this issue was identified as part of a normal practice inspection process. Participants were asked to make a recommendation to the professional conduct committee from a list of possible alternatives. The list was generated based on the set of possible sanctions (from exonerate to cancellation of designation) allowed by the Regulated Accounting Profession Act (RAPA)[14].

Following the completion of the experimental tasks, participants were asked to provide demographic information including their age, gender, rank, amount of audit experience, billable hours and whether they had encountered a situation similar to the case in the study (Appendix D). Consistent with prior studies using the DIT (Ponemon 1995; 1993), participants were finally requested to complete the Defining

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[13] All lists and scale anchors contained in the experimental material are presented in reverse order in half of the experimental material.

[14] In Canada professions are regulated by provincial governments. The Regulated Accounting Profession Act (RAPA) is the Alberta Act that grants the Alberta Institute of Chartered Accountants (and other accounting professional bodies in Alberta) legal authority to conduct disciplinary processes and assess sanctions on individual accountants and registered accounting firms. Each province enacts legislation to provide similar authority to their respective provincial accounting bodies.

Issues Test ("DIT"). The DIT is a widely used and psychometrically reliable instrument used to measure ethical reasoning (Rest 1979) which has a test-retest reliability in the 0.80's range (Rest 1986). The DIT (Appendix E) is a self-administered questionnaire which asks respondents to read a series of one or two paragraph dilemmas that present a different ethical dilemmas. For each dilemma, participants are required to select and rank order those issues that have, in their opinion, the most significant influence on its resolution. The DIT may be administered in a three or six dilemma format. Because of time constraints, the three dilemma format was selected. According to Rest (1986) correlations between the three and six dilemma formats range between 0.90 and 0.95 which suggests that the three-scenario format would produce acceptable results.

5 DESCRIPTIVE STATISTICS AND MANIPULATION CHECKS

5.1 INTRODUCTION

This chapter provides the descriptive statistics of the experimental sample (Sections 5.4 and 5.5) and the results of whether both the independent variables outcome and intentions were successfully manipulated (Section 5.2) and whether the independent variable expertise was successfully measured (Section 5.3). The results of the manipulation check tests of both outcome and intentions indicated that the independent variables were successfully manipulated. Expertise was captured by a reported proxy, firm evaluation. The descriptive statistics of the experimental sample are presented separately as they relate to favorable outcome consequences (Section 5.4) and to unfavorable outcome consequences (Section 5.5).

5.2 RESULTS OF MANIPULATION CHECKS OF OUTCOME AND MANAGEMENT'S INTENTIONS

Manipulation checks of the outcome and management's intentions treatments were included in the post-experiment demographic questionnaire and were completed by the participants following the experimental tasks. A copy of the post-experiment demographic questionnaire which includes the manipulation check questions is provided in Appendix D. Two questions on the demographic questionnaire (i.e. questions 9 and 10) provided data for the manipulation check tests. To measure the effectiveness of the outcome manipulation, participants were asked to rate the adversity of the outcome consequences on a nine-point bipolar

Likert scale anchored with "Not at all adverse" and "Extremely adverse". Participants were asked to rate management's intentions on a nine-point bipolar[15] Likert scale anchored with "Not at all fraudulent" and "Extremely fraudulent".

Mean responses to the manipulation check questions and results of tests of significance comparing the treatment groups are provided in Table 2. A Mann-Whitney nonparametric test of significance was conducted to determine whether the participants in the outcome treatment groups had different interpretations of the outcome consequences. As expected, the results of the manipulation test showed a significant difference ($Z=-3.350$; $p<0.001$) in the interpretation of the outcome consequences in the two outcome treatment groups indicating that the manipulation was successful. In particular, the mean rating of the unfavorable consequences treatment groups was higher (mean = 6.67) than the favorable consequences treatment groups (mean = 5.03). A Mann-Whitney nonparametric test of significance was also conducted to determine whether the participants in the management's intentions treatment groups had different interpretations of management's intentions. The results of the manipulation test showed significant differences ($Z=-5.404$, $p<0.001$) in the interpretation of management's intentions in the management's intentions treatment groups indicating that the manipulation was successful. In particular, the mean rating of the deliberate intentions treatment group was higher (mean = 7.11) than the inadvertent intentions treatment groups (mean = 4.72).

------Insert Table 2-------

[15]The advantage of the bipolar scale is that it is sensitive to variations in judgments.

5.3 Results of Manipulation Check of Expertise

The level of expertise in this study was measured by the proxy firm evaluation. A firm evaluation measure was provided by the firm contact person who was asked to categorize the participants as outstanding (expert) and average (novice) performers according to their firm's performance evaluation system (see Section 4.2). For comparison purposes, rank and P-score were also measured. Rank was a self-reported measure as reported in the post-experiment demographic questionnaire. The DIT's P-score (Rest 1979) was used as a surrogate measure of the ethical reasoning level. The DIT (see Appendix E) was completed by the participants after completion of all of the experimental tasks and the post-experiment demographic questionnaire. In scoring the DIT questionnaire, points were assigned to each subject's responses using a scale of four points for the most important to one point for the least important. The points corresponding to the highest modes of reasoning were used to construct a single measure known as the "P" (principled) score which measured the percentage of post conventional responses made by an individual participant for the entire instrument.

The measures of rank and P-score[16] which have been used as proxies for expertise in prior studies of auditor expertise were compared with this study's proxy, firm evaluation. The analysis revealed statistically significant differences between pairings of all three measures. As expected, firm evaluation and rank measures are significantly different ($t=-15.035$; $p<0.001$) and are not significantly correlated (0.008, $p=0.928$). Their difference is attributable to the method of

[16] There was no significant difference in the P-scores of participants assigned to the four treatment groups. The mean DIT P-Score for all the participants was 42.2 and the range of DIT P-score was 40.6 to 44.3.

selection of the participants such that the participants were selected by the firm contact person who was asked to categorize the participants into outstanding (expert) and average (novice) performers according to the firm's performance evaluation system within each rank.

The level of ethical reasoning level (i.e. P-score) was not correlated with either firm evaluation or rank. The P-score was significantly different from firm evaluation ($t = -13.708$; $p<0.001$) and was not significantly correlated ($r=-0.132$, $p=0.237$) with firm evaluation. Similarly, the P-score was significantly different than rank ($t = -12.463$; $p<0.001$) and was not significantly correlated ($r = 0.107$; $p=0.340$) with rank. Similar findings have been reported by Schatzberg et al (2005) who found inconsistent results in their experiment between P-scores and the behavior of auditors. Prior studies employing the DIT in an audit setting (Lampe and Finn 1992; Ponemon 1992; also see Ponemon 1994 for a review) found that members of the accounting and auditing profession as well as college students in accounting programs do not develop ethical reasoning commensurate with individuals having similar social, economic or educational backgrounds and are clustered around lower P-scores. Ponemon's (1992) longitudinal study of auditors' level of ethical reasoning corroborated the existence of ethical socialization such that individuals progressing from one rank to another (e.g. from manager to partner positions within the firm) tend to possess lower and more homogeneous DIT P-scores. In contrast, Ponemon and Gabhart (1993) in a study comparing Canadian and US auditors, found that Canadian auditors at all ranks possessed markedly higher and less homogeneous DIT P-scores than did US auditors. This study used

participants employed by Canadian accounting firms and the results are comparable to those reported by Ponemon and Gabhart's (1993) study of Canadian auditors. As the results and prior research demonstrated, the DIT's P-score is ineffective in categorizing Canadian auditors. The results also suggest that P-score, rank and firm evaluation are not perfect substitutes as proxies of expertise. Each study must assess the appropriateness of the expertise measure employed. In this study, the expertise measure was provided by those in the profession itself according to their firm evaluation system. As planned, firm evaluation was used as the proxy for expertise in this study.

5.4 Descriptive Statistics : Favorable Outcomes

5.4.1 Introduction

Descriptive statistics of the dependent variables are presented by treatment group. There were four treatment groups (i.e. favorable outcome/inadvertent intentions; favorable outcome/deliberate intentions; unfavorable outcome/inadvertent intentions; and unfavorable outcome/deliberate intentions) for which means and standard deviations are reported. Each treatment group was further partitioned by a proxy of expertise (i.e. firm evaluation) and results of the partitioning are also presented. Outstanding (expert) auditors were those identified by the firm contact partner administering the study as being evaluated as outstanding according to the firm's evaluation system while average (novice) auditors were those identified by their firm's evaluation system as not outstanding. The descriptive statistics for the dependent variables, ethical sensitivity, the

evaluation of the appropriateness of auditor judgment and the assessment of sanctions against the auditor, are reported separately (see sections 5.4.2, 5.4.3 and 5.4.4 respectively) and discussed by type of outcome consequences both favorable and unfavorable. This section discusses the results when outcome consequences were favorable.

5.4.2 Descriptive Statistics: Ethical Sensitivity

The measure of the ethical sensitivity dependent variable was the number of stakeholder types identified by each participant; each participant was asked to identify all parties whose interests should have been considered in each audit. Mean ethical sensitivity was an aggregate measure. The auditor in the experiment's scenario had two clients for each of whom the auditor provided an unqualified opinion. One of those clients either inadvertently or deliberately overvalued an asset ("Problematic Client") while the other client unknowingly reported that asset at its overvalued amount in their financial statements ("Other Client"). Consequently there were two measures of ethical sensitivity corresponding to the two clients in the experiment's scenarios. Those two measures were aggregated to generate an overall (i.e. composite) ethical sensitivity measure for each participant.[17] The mean (standard deviation of) ethical sensitivity by treatment group is reported in Table 3.

In the outcome treatment groups, participants were randomly assigned to either a favorable or an unfavorable consequences treatment condition. Regardless of outcome, outstanding (expert) participants' mean ethical sensitivity was higher

[17] Descriptive results of mean ethical sensitivity which corresponded to each of the two clients in the experimental scenario were similar to the overall composite mean ethical sensitivity results.

than the average (novice) participants' mean ethical sensitivity. Outstanding (expert) participants identified more stakeholder types ($mean_{expert}$=9.02) than average (novice) participants ($mean_{novice}$=8.07). When outcome consequences were favorable, the outstanding (expert) participants were more ethically sensitive than were the average (novice) participants. On average, the outstanding (expert) participants' identified 8.90 (std dev=2.226) different stakeholder types as compared to the average (novice) participants who identified 6.07 (std dev=1.617) different stakeholder types. Outstanding (expert) participants identified 2.83 more stakeholder types on average than did the average (novice) participants.

------Insert Table 3-------

To supplement the measure of ethical sensitivity used in this study, the experiment required the study's participants to list the stakeholder types identified in rank order of importance. The study's participants in aggregate identified a range of stakeholder types that included shareholders, management, financial institutions, employees, suppliers, customers, the general public, community, regulators and taxation agencies. The frequency of identification by stakeholder type is provided in Table 4. Stakeholder type was assessed by two raters. Both raters reviewed the participants' responses and categorized the stakeholder type identified. Using Cohen's (1960) kappa measure, an inter-rater reliability of 0.96 ($p<0.001$) was obtained. The small number of differences between the two raters was subsequently reconciled.

------Insert Table 4-------

The frequency results are reported by stakeholder type as identified by outstanding (expert) and average (novice) participants (see Table 4). The frequency results indicated that overall the range of stakeholder types identified was similar when comparing outstanding (expert) and average (novice) participants' responses however outstanding (expert) participants identified more stakeholder types ($total_{expert}$=621) than did the average (novice) participants ($total_{novice}$=512). When outcomes were favorable the results were similar to the overall results. Outstanding (expert) participants identified more shareholder types ($favorable_{expert}$=296) than did the average (novice) participants ($favorable_{novice}$=196). The frequency of the identification of stakeholder types for outstanding (expert) participants was shareholders (62), client management (39), the community (34), and other clients (30); these four stakeholder types represented 50% of the total stakeholder types identified. The frequency of identification of stakeholder types for average (novice) participants was shareholders (34), financial institutions (34), the community (34), and other clients (27); these four stakeholder types represented 66% of the total stakeholders identified. Interestingly, shareholder, community and other client were the most frequently identified stakeholder types for both types of participants. Those three stakeholder types represent 43% and 49% of the frequency of stakeholder type identifications by outstanding (expert) participants and by average (novice) participants respectively. These frequency results suggested that the pattern and

frequency of stakeholder identification was dependent on the firm evaluation when outcome consequences were favorable.

5.4.3 Descriptive Statistics: Evaluative Judgment

In the experiment, participants were asked to assess the decision of the auditor to issue unqualified audit opinions. As part of the experiment, participants were asked to both provide assessments of the appropriateness of the auditor's decision and select the appropriate audit decision for the auditor who faced an ethical dilemma in the experiment's case scenario. In the scenario, one client either inadvertently or deliberately overvalued an asset ("Problematic Client") and the other client unknowingly reported the overvalued asset ("Other Client"). The auditor in the experimental scenario issued an unqualified audit opinion for both clients in the scenario.

Participants were asked to rate on a 5 point Likert scale, anchored at one end with very appropriate (1) and at the other end with very inappropriate (5), the appropriateness of the auditor's judgment in issuing an unqualified audit opinion for the "Problematic Client". Participants also rated on a 5 point Likert scale the appropriateness of the auditor's judgment in issuing an unqualified opinion for the "Other Client". Table 5 presents the descriptive statistics of the mean appropriateness rating by treatment group and for both audit judgments partitioned by firm evaluation. The auditor in the experiment's scenario had two clients for each of whom the auditor provided an unqualified audit opinion. One of those clients either inadvertently or deliberately overvalued an asset ("Problematic Client") while

the other client unknowingly reported that asset at its overvalued amount in their financial statements ("Other Client"). Consequently, there are two measures reported for appropriateness of judgment corresponding to the two clients in the experiment's scenario.

------ Insert Table 5 ------

As reported in Panels A and B of Table 5, the outstanding (expert) participants assessed the appropriateness of the auditors' judgments as less appropriate ($mean_{problematic\ client}$=4.025; $mean_{other\ client}$=3.72) than did the average (novice) participants ($mean_{problematic\ client}$=3.72; $mean_{other\ client}$=2.87). When the outcome consequences were favorable, both outstanding (expert) ($mean_{problematic\ client}$=3.66 and $mean_{other\ client}$=2.45) and average (novice) participants' ($mean_{problematic\ client}$=3.23 and $mean_{other\ client}$=2.87) assessments of appropriateness were similar.

To supplement the evaluative measure of judgment appropriateness used in this study, participants were asked to make a selection from a list of alternatives available to the auditor in the scenario. Two lists were provided corresponding to the two clients in the experimental scenario for each of whom the auditor issued an unqualified opinion. Both lists included alternatives from resign from the audit to issue an unqualified opinion (i.e. what the auditor in the experiment's scenario did for both clients). Table 6 presents the descriptive statistics of the results based on the proportion of participants who selected each option in the favorable and unfavorable outcome treatment groups. With regard to the issue of an unqualified opinion for the "Problematic Client", the majority of both outstanding (expert)

participants (69.7%) and average (novice) participants (61.3%) selected qualification of the audit opinion as the most appropriate auditor judgment (i.e. #2) when outcomes were favorable. Further, both outstanding (expert) participants and average (novice) participants' predictions of what other auditors would select corresponded to their own selections ($percentage_{expert}$=41.06%; $percentage_{novice}$=43.87%).

------ Insert Table 6 ------

With regard to the appropriateness of the issue of an unqualified opinion for the "Other Client", when the outcome consequences were favorable the majority of outstanding (expert) participants (54.55%) selected issue of an unqualified audit opinion (i.e. #1) as the most appropriate auditor judgment with the selection of write-down the overpriced asset without any disclosure (i.e. #2) as the second most chosen selection (23.5%). In contrast, the majority of average (novice) participants (80.6%) selected write-down the overpriced asset without any disclosure (i.e. #2) as the most appropriate auditor judgment with the selection of resign from the audit (i.e. #4) as the second most chosen selection (19.4%). Further both outstanding (expert) participants and average (novice) participants predictions of what other auditors would select corresponded to their own selections (percentage $_{expert}$=60.06%, #1; $percentage_{novice}$=71.39%, #1).

5.4.4 Descriptive Statistics: Assessment of Sanctions Against the Auditor

Participants were asked to assess the potential sanctions against the auditor in the experimental case scenario related to the issue of unqualified opinions for both clients. Two separate sanctions were assessed corresponding to the two clients in the experiment's case scenario. Selection of the sanctions against the auditor for issuing an unqualified audit opinion for either client was measured on a 6 point scale which ranged from (1) exonerate (no penalty and no further action required) to (6) cancellation or resignation of designation (not able to practice as a CA). Each successive point on the scale corresponded to progressively harsher sanctions.

Table 7 presents the descriptive statistics of the sanctions against the auditor by treatment group for both sanction judgments partitioned by firm evaluation. The auditor in the experiment's scenario had two clients for each of whom the auditor provided an unqualified audit opinion. One of those clients either inadvertently or deliberately overvalued an asset ("Problematic Client") while the other client unknowingly reported that asset at its overvalued amount in their financial statements ("Other Client"). Consequently, there are two measures reported for sanctions against the auditor corresponding to the two clients in the experiment's scenario.

Descriptive analysis related to the unqualified opinion issued for the "Problematic Client" (see Panel A of Table 7) indicated that the outstanding (expert) participants generally assessed less harsh sanctions against the auditor ($mean_{expert}$=3.33; std dev= 1.427) than did the average (novice) participants ($mean_{novice}$=3.66; std dev=1.566). When the outcome consequences were favorable,

outstanding (expert) participants assessed slightly harsher sanctions against the auditor in the case scenario ($mean_{expert}$=3.03; std dev=1.546) than did the average (novice) participants ($mean_{novice}$=2.67; std dev=1.561).

The descriptive results for the mean sanctions levied against the auditor for the issue of an unqualified audit opinion for the "Other Client" are presented in Panel B of Table 7. Similar to results for the "Problematic Client", outstanding (expert) participants assessed less harsh sanctions on the auditor ($mean_{expert}$=2.00; std dev=1.161) than did average (novice) participants ($mean_{novice}$=2.90; std dev=1.706). When the outcome consequences were favorable, outstanding (expert) participants assessed slightly harsher sanctions against the auditor in the case scenario ($mean_{expert}$=1.73; std dev=1.256) than did the average (novice) participants ($mean_{novice}$=1.83; std dev=1.015). For both the outstanding (expert) and average (novice) participants, sanctions against the auditor were less harsh for the judgment to issue an unqualified opinion for the affected client (i.e. "Other Client") than for the client who overvalued an asset ("Problematic Client"). The results suggested empathy toward the auditor for issuing an unqualified opinion for the client who was affected by the intentions of the other client (i.e. "Problematic client') perhaps because of professional confidentiality requirements.

------ Insert Table 7------

5.5 Descriptive Statistics: Unfavorable Outcomes

5.5.1 Introduction

Descriptive statistics of the dependent variables are presented by treatment group. There were four treatment groups (i.e. favorable outcome/inadvertent intentions; favorable outcome/deliberate intentions; unfavorable outcome/inadvertent intentions; and unfavorable outcome/deliberate intentions) for which means and standard deviations are reported. Each treatment group was further partitioned by a proxy for expertise (i.e. firm evaluation) and results of the partitioning are also presented. The descriptive statistics for the dependent variables, ethical sensitivity, the evaluation of the appropriateness of auditor judgment and the assessment of sanctions against the auditor, are reported separately (see sections 5.5.2, 5.5.3 and 5.5.4 respectively) and discussed by the type of outcome consequences both favorable and unfavorable. This section reports and discusses the results when outcome consequences were unfavorable.

5.5.2 Descriptive Statistics: Ethical Sensitivity

Mean (standard deviation of) ethical sensitivity is reported in Table 3. The measure of ethical sensitivity was the number of stakeholder types identified by each participant. In the outcome treatment groups, participants were randomly assigned to either a favorable or an unfavorable consequences condition. This section reports and discusses the results when outcome consequences were unfavorable. Regardless of firm evaluation, ethical sensitivity was higher in the unfavorable outcome treatment groups ($mean_{unfavorable}$ = 9.61; std dev =3.251) as compared with the favorable outcome treatment groups ($mean_{favorable}$ = 7.46; std dev

= 2.395). On consideration of firm evaluation, when outcomes were unfavorable, outstanding (expert) participants' identified on average 9.14 (std dev=2.785) different stakeholder types as compared to the average (novice) participants who identified on average 10.07 (std dev=3.651) different stakeholder types. When outcomes were unfavorable, outstanding (expert) participants were slightly less ethically sensitive than were average (novice) participants.

To supplement the ethical sensitivity measure, the experiment required the study's participants to list the stakeholder types identified in rank order of importance. The frequency of identification by stakeholder type is provided in Table 4. The frequency results are reported by treatment level for both outcome consequences (i.e. favorable and unfavorable) and further are partitioned by the firm evaluation (i.e. outstanding (expert) and average (novice)) (see Table 4). As reported in Section 5.4.2, regardless of outcome, outstanding (expert) participants' mean ethical sensitivity was higher than the average (novice) participants' mean ethical sensitivity. When outcomes were unfavorable, the results were dissimilar to the overall results. The outstanding (expert) participants identified a similar number of stakeholders ($total_{expert}$=325) as did the average (novice) participants ($total_{novice}$=317) when outcomes were unfavorable. The frequency of identification for outstanding (expert) participants was shareholders (46), financial institutions (43), client management (37), and customers (37); these four stakeholder types represented 50% of those stakeholders identified. The frequency of identification for average (novice) participants was the other client (39), client management (38), shareholders (34), and employees (34); these four stakeholder types represented

46% of the total stakeholders identified when outcomes were unfavorable. Only average (novices) identified the audit profession as being an affected stakeholder and they did this only the outcome was unfavorable. Shareholder and client management were the most frequently identified stakeholder types for both types of participants. Again these frequency results suggest that the pattern and frequency of stakeholder identification is dependent on firm evaluation when outcome consequences are unfavorable.

The frequency results (see Table 4) further demonstrated the magnitude of the difference between the two outcome treatment groups for outstanding (expert) and average (novice) participants. Overall, the number of stakeholders identified in the unfavorable treatment group regardless of firm evaluation was 642 and in the favorable outcome treatment group was 422. The magnitude of the spread between the two outcomes was 220. The magnitude of that spread was determined primarily by the magnitude of the spread in the stakeholders identified between the outcome treatment groups for average (novice) participants. Average (novice) participants identified 196 stakeholders when the outcome was favorable and identified 317 stakeholders when the outcome was unfavorable. The magnitude of the difference was 121 stakeholders (i.e. 61.7% increase). In contrast, outstanding (expert) participants identified 296 stakeholders when the outcome was favorable and 325 stakeholders when the outcome was unfavorable. The magnitude of the difference was only 29 (i.e. 9.8% increase). Although both outstanding (expert) and average (novice) participants' ethical sensitivity (i.e. number of stakeholders identified) was higher in the unfavorable outcome treatment group as compared to the favorable

outcome treatment group, the average (novice) participants' ethical sensitivity appeared more affected by the unfavorable outcome than did the ethical sensitivity of the outstanding (expert) participants.

Descriptive statistics for the affect of the independent variable management's intentions treatment are also reported in Table 3. In the management's intentions treatment groups, participants were randomly assigned to either the inadvertent or the deliberate management's intentions conditions. Ethical sensitivity was higher in the deliberate management's intentions treatment groups ($mean_{deliberate}$ = 8.79; std dev = 3.437) as compared with the inadvertent treatment groups ($mean_{inadvertent}$ = 8.21 ; std dev = 2.548). In the unfavorable outcome and deliberate intentions treatment condition, the mean ethical sensitivity was consistently higher for the average (novice) participants ($mean_{average}$ =12.14; std dev=2.958) than for the outstanding (expert) participants ($mean_{expert}$=8.00; std dev=3.328). The average (novice) participants appear to react very strongly to the interaction of the deliberate intentions and negative outcome as evidenced by their higher mean ethical sensitivity.

5.5.3 Descriptive Statistics: Evaluative Judgment

Overall the assessment of the appropriateness of the auditor's judgment to issue an unqualified opinion for the "Problematic" Client (see Panel A of Table 5) was assessed as somewhat inappropriate (mean=3.86; std dev=1.02). Participants in the unfavorable treatment groups judged the appropriateness of the auditor's decision to issue an unqualified opinion for the "Problematic Client" as less

appropriate (mean=4.30; std dev=0.570) than did participants in the favorable outcome condition groups (mean=3.44; std dev=1.263). The mean appropriateness for the unfavorable outcome condition connoted a somewhat inappropriate to very inappropriate evaluation while the mean appropriateness of the favorable group connoted a neutral to somewhat inappropriate evaluation of auditor judgment. Participants were asked to provide a second assessment of auditor judgment to issue an unqualified opinion for the "Other Client" (see Panel B of Table 5). As expected and consistent with the results related to the "Problematic Client" results, the mean appropriateness in the unfavorable outcome condition (mean=3.34, std dev=1.294) was assessed as more inappropriate than in the favorable outcome condition (mean=2.66, std dev=1.409). Although both outstanding (expert) and average (novice) participants' assessments of appropriateness were affected by the outcome, outstanding (expert) participants consistently assessed the appropriateness of the auditor's issue of an unqualified opinion as less appropriate (mean=4.025 and mean=3.72) than did average (novice) participants (mean=3.72 and mean=2.87).

To supplement the analysis of the assessment of the appropriateness of audit judgment, participants were asked to make a selection from a list of possible auditor actions. Two lists were provided corresponding to the two clients in the experimental scenario for each of whom the auditor issued an unqualified opinion. Both lists included alternatives from resign from the audit to issue an unqualified opinion (i.e. what the auditor in the experiment's scenario did for both clients). Table 6 presents the descriptive statistics for the results based on the proportion of participants who selected each option for each outcome treatment group. With

regard to the issue of an unqualified opinion for the "Problematic Client", when the outcome consequences were unfavorable the majority of both outstanding (expert) participants (81.8%) and average (novice) participants (58.1%) selected qualification of the audit opinion as the most appropriate auditor judgment (i.e. #2) however the average (novice) participants seemed spilt between qualification of the audit report and resignation from the audit engagement (41.9%); the outstanding (expert) participants were less divided. With regard to the appropriateness of the issue of an unqualified opinion for the "Other Client", when the outcome consequences were unfavorable the majority of outstanding (expert) and average (novice) participants were divided in their selection of the appropriate auditor judgment. Outstanding (expert) participants were split between issue an unqualified audit opinion (50.0%) (i.e. #1) and qualify the audit opinion (45.5%) (i.e. #2). Average (novice) participants' selection of the most appropriate auditor judgment was split among four options with the majority (48.4%) of the participants selecting write down the overpriced asset without disclosure (i.e. #2). Overall, average (novice) participants appeared more indecisive in their selection of the appropriate alternative when the outcome consequences were unfavorable and further were more indecisive in their predictions of what other auditors would select than were outstanding (expert) participants.

Descriptive statistics for the intentions treatment are also reported in Table 5. In the intentions conditions, participants' assessment of the appropriateness of the auditor's judgment was assessed as slightly more inappropriate in the deliberate intentions condition (mean=3.97; std dev=1.199) than in the inadvertent intentions

condition (mean=3.75; std dev=0.931). Consistently in both management's intentions conditions (i.e. deliberate and inadvertent), the assessment of inappropriateness was higher in the unfavorable outcome condition (mean=3.96 and mean=4.64) than in the favorable outcome condition (mean=3.55 and mean=3.33). Also, mean appropriateness assessments in the deliberate intentions conditions (mean=3.14 std dev=1.538) were lower (i.e. less appropriate) than they were in the inadvertent intentions condition (mean=2.84; std dev=1.218) but only slightly. Similar to the mean appropriateness assessment of auditor judgment for the "Problematic Client" (see Panel A of Table 5), in both management's intentions conditions (i.e. deliberate and inadvertent), the assessment of inappropriateness was higher in the unfavorable outcome condition (mean=3.96 and mean=4.64) than the favorable outcome (mean=3.55 and mean=3.33). Further, although both outstanding (expert) and average (novice) participants' assessments of appropriateness seemed somewhat affected by management's intentions, outstanding (expert) participants reasonably consistently assessed the appropriateness of the auditor's judgment as more inappropriate in both the deliberate ($mean_{problematic\ client}$=4.43 and $mean_{other\ client}$ =3.20) and inadvertent intentions ($mean_{problematic\ client}$=4.13 and $mean_{other\ client}$ =3.08) conditions than did the average (novice) participants ($mean_{problematic\ client}$=3.90 and $mean_{problematic\ client}$=2.50; $mean_{other\ client}$ =3.59 and $mean_{other\ client}$ =3.23).

5.5.4 Descriptive Statistics: Assessment of Sanctions Against the Auditor

Participants were asked to assess potential sanctions against the auditor in the experimental case scenario related to the issue of unqualified opinions for each

client in the experiment's case scenario[18]. Selection of the sanctions against the auditor for issuing an unqualified audit opinion for each client was measured on a 6 point scale with progressively harsher sanctions. The mean (standard deviations of) sanctions by treatment groups partitioned by outcome consequences are presented in Table 7.

Descriptive analysis related to the unqualified opinion issued for the "Problematic Client" (Panel A of Table 7) indicated that in the unfavorable treatment groups, ($mean_{unfavorable}$=4.17;std dev=1.556) harsher sanctions were levied against the auditor relative to the sanctions levied in the favorable treatment outcome groups ($mean_{favorable}$=2.85; std dev=1.552). Both outstanding (expert) and average (novice) participants assessed harsher sanctions in the unfavorable condition ($mean_{expert}$=3.63; std dev=1.245 and $mean_{novice}$=4.64; std dev=1.660) than in the favorable outcome condition ($mean_{expert}$=3.03; std dev=1.546 and $mean_{novice}$=2.67; std dev=1.561) however average (novice) participants were more harsh than outstanding (expert) participants in the unfavorable condition only. When the outcome consequences were unfavorable, outstanding (expert) participants assessed less harsh sanctions against the auditor in the case scenario ($mean_{expert}$ =3.63; std dev=1.245) than did the average (novice) participants ($mean_{novice}$ =4.64; std dev=1.660). Further, the magnitude in the difference in the assessment of sanctions between the favorable and the unfavorable outcome conditions was much larger for the average (novice) participants ($mean_{favorable}$ =2.67 vs. $mean_{unfavorable}$ = 4.64 = 1.97 mean difference) than for the difference in sanctions assessment by the

[18] Respondents were asked to both assess potential sanctions and further provide a written justification for the assessment. Only 7% of the respondents provided written support for their assessment of sanctions so no qualitative analysis of these responses was undertaken.

outstanding (expert) participants ($mean_{favorable}$ = 3.03 vs. $mean_{unfavorable}$ = 3.63 = 0.60 mean difference).

The descriptive results for the mean sanctions levied against the auditor for the issue of an unqualified audit opinion for the "Other Client" are presented in Panel B of Table 7. Similarly, harsher mean sanctions were levied in the unfavorable outcome condition ($mean_{unfavorable}$ =3.19; std dev=1.669) than in the favorable outcome condition ($mean_{favorable}$ =1.83; std dev=1.071). Generally outstanding (expert) participants also assessed less harsh sanctions against the auditor ($mean_{expert}$ =2.00; std dev=1.161) than did average (novice) participants ($mean_{novice}$ =2.90; std dev=1.706). When the outcome consequences were unfavorable, outstanding (expert) participants assessed less harsh sanctions against the auditor in the case scenario (mean=3.63; std dev=1.245) than did the average (novice) participants (mean=4.64; std dev=1.660). The outstanding (expert) and average (novice) participants both assessed harsher sanctions in the unfavorable outcome condition ($mean_{expert}$ =2.17 and $mean_{novice}$=4.07) than in the favorable outcome condition ($mean_{expert}$ =1.83 and $mean_{novice}$=1.73) however the difference in the assessments for the average (novice) participants was much larger (mean $difference_{expert}$ =0.34 vs. mean $difference_{novice}$=2.34) than the difference in assessments for the outstanding (expert) participants. Overall novices seemed highly affected by unfavorable outcome consequences in their assessment of sanctions against other auditors. Expert auditors demonstrated less susceptibility to unfavorable outcome consequences which suggests experts should be consulted to assess auditor judgment in a peer review context. The use of experts in litigation is

also necessary as judges and jurors have shown a significant and robust effect of outcome on their assessments of auditors.

Table 7 also reports the descriptive statistics for the effect of management's intentions treatments (i.e. inadvertent and deliberate) on the assessment of sanctions. For the "Problematic Client", the deliberate intentions treatment ($mean_{deliberate}$=3.56; std dev=1.583) evoked slightly harsher sanctions on the auditor than did the inadvertent intentions treatment ($mean_{inadvertent}$=3.39; std dev=1.820). Further, outstanding (expert) participants levied harsher sanctions against the auditor in the deliberate condition ($mean_{deliberate}$ =4.0; std dev=1.239) than in the inadvertent condition ($mean_{inadvertent}$ =2.80; std dev=1.409). In contrast, the average (participants) levied more harsh sanctions against the auditor in the inadvertent condition ($mean_{inadvertent}$ =4.00; std dev=1.740) than in the deliberate condition ($mean_{deliberate}$ =3.27; std dev=1.337). For the "Other Client" (see Panel B of Table 7), in contrast to the results reported in Panel A, harsher mean sanctions were levied against the auditor in the inadvertent condition than in the deliberate condition ($mean_{inadvertent}$ =2.75 vs. $mean_{deliberate}$=2.11). Participants in both the inadvertent and deliberate conditions assessed harsher sanctions in the unfavorable outcome condition ($mean_{inadvertent}$ =3.71 and $mean_{deliberate}$=2.58) than in the favorable outcome condition ($mean_{inadvertent}$ =1.83 and $mean_{deliberate}$ =1.73). Outstanding (expert) and average (novice) participants assessed hasher sanctions in the inadvertent intentions condition ($mean_{expert}$=2.18 and $mean_{novice}$=3.36) than in the deliberate intentions condition ($mean_{expert}$ =1.76 and $mean_{novice}$ =2.45).

6 STATISTICAL ANALYSIS

6.1 INTRODUCTION

The main analysis employed to examine the impact of the three independent variables (outcome, intentions and expertise) on the dependent variables, ethical sensitivity and judgment, was analysis of variance. The between-subjects experimental design placed participants in one of four experimental treatments: 1) favorable outcome consequences and deliberate intention of management to mislead; 2) favorable outcome consequences and no deliberate intention of management to mislead; 3) adverse outcome consequences and deliberate intention of management to mislead; and 4) adverse outcome consequences and no deliberate intention of management to mislead. Each treatment group was partitioned by firm evaluation into outstanding (expert) and average (novice) participants.

An analysis of variance (ANOVA) was conducted to analyze the data. ANOVA is a specific and restricted general approach adopted in multiple regression. Statistical assumptions underlying ANOVA were satisfied. Levine's Test of Equality of Variances showed no significant differences for the dependent variables captured in the study ($F_{\text{ethical sensitivity}} = 0.828$, $p=0.146$; $F_{\text{appropriateness of judgment (1)}} = 1.009$, $p=0.456$; $F_{\text{appropriateness of judgment (2)}} = 2.090$, $p=0.106$; $F_{\text{assessment of sanctions (1)}} = 1.119$, $p=0.115$; $F_{\text{assessment of sanctions (2)}} = 0.791$, $p=0.434$). The scales for measuring the dependent variables were tested for skewness and kurtosis. Overall the distributions appeared reasonably normal. Demographic variables captured in a post-experiment

questionnaire were included in the analysis to check on the randomization of the various groups. Statistical tests performed on the demographic measures indicated randomization was successful across treatment groups.

ANOVA was used to analysis each dependent variable instead of MANOVA. Although several dependent variables were measured, there is no theoretical or empirical basis for grouping the dependent variables in a MANOVA (Field 2005). The situations in which MAONVA is more powerful than ANOVA are quite limited (Tabachnick and Fidell 2001). MANOVA works best with highly negatively correlated dependent variables and is not necessary if the dependent variables are only moderately correlated (Tabachnick and Fidell 2001). MANOVA was used to assess the correlations between the two dependent variables, evaluative judgments and assessments of sanctions against the auditor. The dependent variables were only moderately correlated consequently ANOVA was the best form of analysis for the data (Field 2005).

6.2 Statistical Analysis: Favorable Outcomes

6.2.1 Introduction

ANOVA allowed for an investigation of both the main effects and interactions of the independent variables on both auditor ethical sensitivity measured as the absolute number of stakeholder types identified and auditor judgment when the audit outcome was favorable. The data was analyzed using firm evaluation as the proxy for expertise.

6.2.2 Test of Hypothesis One

Hypothesis One predicted that when the outcome of the audit was favorable auditors' ethical sensitivity would be influenced by the level of expertise, more specifically, experts' ethical sensitivity would be higher than novices' ethical sensitivity. Outcome, management's intentions and expertise served as the independent variables in the analysis. Table 8 presents the ANOVA findings (see Section 5.4.2 for related treatment means, standard deviations and cell sizes). ANOVA results indicated that the outstanding (expert) participants' ethical sensitivity differed from the average (novice) participants' ethical sensitivity when outcome consequences differed. The outcome x evaluation interaction was significant ($F=17.560$; $p<0.001$). Subsequent analysis using a priori contrasts showed that, as predicted, when outcome consequences were favorable, outstanding (expert) participants' ethical sensitivity (mean=8.90) was significantly different ($F=46.311$; $p<0.001$) and higher than the ethical sensitivity of the average (novice) participants (mean=6.07). Hypothesis One was supported.

In addition to the interactive effect between expertise and outcome, the main effect for expertise was evident and significant The results reported in Table 8 demonstrated a main effect for firm evaluation ($F=4.543$; $p<0.035$). Outstanding (expert) and average (novice) participants' mean ethical sensitivity differed significantly. Outstanding (expert) participants identified more stakeholder types overall. Subsequent analysis using a priori contrasts showed that, as predicted, the outstanding (expert) participants demonstrated a significantly higher ($F=48.711$;

$p<0.001$) mean level of ethical sensitivity (9.02 vs 8.07) based on number of stakeholder types identified than did the average (novice) participants.

------ Insert Table 8 ------

To supplement the analysis of ethical sensitivity, participants were also asked to explicitly indicate the stakeholder types identified. Participants identified a wide range of stakeholder types. Table 9 reports the results of analysis of stakeholder types identified between outstanding (expert) and average (novice) participants. Levine's Test of Equality of Variances showed significant differences for some of the stakeholder types identified by participants. Consequently, Mann-Whitney nonparametric tests of significance were conducted to determine whether the stakeholder types identified differ between experts and novices. When the outcome consequences were favorable, the results suggest that all of the Shareholders, Client Management, Employees, Financial Institutions, the Board of Directors, CCRA, Regulators, the Audit Profession and Other were significantly different between outstanding (expert) and average (novice) participants at the 0.05 level.

------ Insert Table 9 ------

6.2.3 Test of Hypothesis Two

Hypothesis Two (a&b) predicted that experts' mean ethical sensitivity would be higher than novices' mean ethical sensitivity when management's intentions

were inadvertent but not when management's intentions were deliberate. Outcome, management's intentions and expertise served as the independent variables. Table 8 presents the ANOVA results (see Section 5.4 for related treatment means, standard deviations and cell sizes). The aggregate results indicated that auditors' ethical sensitivity was not significantly influenced by management's intentions ($F=2.284$; $p=0.134$). The intention x firm evaluation interaction however is significant ($F=4.543$; $p=0.035$). In the deliberate intentions treatment groups, outstanding (expert) participants' mean ethical sensitivity was significantly ($p>0.001$) higher than the mean ethical sensitivity of average (novice) participants (i.e. mean $_{expert}=9.445$ vs. $mean_{novice}=6.93$). Similarly, in the inadvertent intentions treatment groups, outstanding (expert) participants' mean ethical sensitivity was significantly higher ($p<0.001$) than the mean ethical sensitivity of average (novice) participants (i.e. $mean_{expert}=8.67$ vs. $mean_{novice}=5.86$). These results provided support for Hypothesis Two (a) but not for Hypothesis Two (b). When outcomes were favorable, outstanding (expert) participants' ethical sensitivity was higher than and average (novice) participants' ethical sensitivity regardless of management's intentions.

6.2.4 Test of Hypothesis Three

Hypothesis Three predicts that outstanding (expert) auditors' evaluative judgments of other auditors' ethical judgments would differ from the evaluative judgments of average (novice) auditors when the outcome consequences were favorable. In this study's experimental task, participants were asked to rate the

appropriateness of the auditor's decisions in the experimental scenario. The auditor made two decisions (i.e. one for each client) and both decisions were to issue unqualified opinions. Participants assessed appropriateness on a five point Likert scale anchored at very appropriate on one end (1) and at the other end as very inappropriate (5). Table10 presents the ANOVA results (see Section 5.4.3 for related treatment means, standard deviations and cell sizes) partitioned by firm evaluation as the proxy for expertise. Outcome, management's intentions and expertise served as the independent variables in the analysis. The outcome x expertise interaction was significant for the assessment of the appropriateness of the auditors' judgments for the "Other Client" ($F=8.727$; $p=0.004$) but insignificant for the assessment of appropriateness for the "Problematic Client" ($F=0.419$; $p=0.519$).

------ Insert Table10 ------

When the outcome consequences were favorable, for the "Problematic Client" the difference in the assessment of the appropriateness of auditor judgment between outstanding (expert) and average (novice) participants was insignificant ($P<0.134$) however for the "Other Client" the difference between outstanding (expert) and average (novice) participants was significant ($P=0.004$). Participants were asked to make a selection from a list of possible auditor actions. Two lists were provided corresponding to the two clients in the experimental scenario for each of whom the auditor issued an unqualified opinion. Both lists included categorical alternatives from resign from the audit to issue an unqualified opinion (i.e. what the

auditor in the experiment's scenario did for both clients). An analysis of the difference between outstanding (expert) and average (novice) participants' selection of the appropriate auditor judgment was completed using non parametric tests of significance because the selections were categorical in nature. When the outcome was favorable, Table11 reports that only for the "Problematic Client" the difference between expert and novice auditors' selections of the appropriate auditor judgment is significant (Z=-3.095; p=0.002).

------ Insert Table11 ------

6.2.5 Test of Hypothesis Four

Hypothesis Four predicted that when the outcome was favorable outstanding (expert) auditors' assessment of sanctions against the auditor differed from the assessment of average (novice) auditors' assessment. In this study's experimental task, participants were asked to assess the appropriate sanctions to be levied against the auditor in the experimental scenario. Peer review is an institutionalized process within the profession for which there are established guidelines. Participants assessed the levy of sanctions against the auditor on a six point scale anchored at one end with exonerate (1) and at the other end with cancel or resignation of the Chartered Accountant designation (6). The auditor in the experimental task scenario made two decisions (i.e. one for each of the clients) and both decisions were to issue unqualified opinions.

ANOVA results are presented in Table 12. Outcome, management's intentions and expertise served as the independent variables in the analysis. The results of the analysis indicated that the interaction between outcome and firm evaluation was significant for the assessment of sanctions against the auditor for both the audit opinion issued for the "Problematic Client" ($F=7.523$; $p=0.007$) and for the audit opinion issued for the "Other Client" ($F=20.715$; $p<0.001$). The impact of outcome on experts' and novices' assessments of sanctions significantly differed. In the favorable outcome condition, the mean sanctions levied against the auditor assessed by outstanding (expert) participants ($mean_{expert}=3.03$; std dev=1.546) and assessed by average (novice) participants ($mean_{novice}=2.67$; std dev=1.561) were significantly different ($p<0.001$). A similar pattern of results occurred in an analysis of the sanctions levied against the auditor who issued an unqualified opinion for the "Other Client". Hypothesis Four was supported. Outstanding (expert) and average (novice) participants' assessment of auditor's ethical judgment appropriateness differed when outcome consequences were favorable.

------ Insert Table 13 ------

6.3 Statistical Analysis: Unfavorable Outcomes

6.3.1 Introduction

ANOVA analysis allowed for an investigation of both the main effects and interactions of the independent variables on both auditor ethical judgment and sensitivity measured as the absolute number of stakeholder types identified in each

treatment group when the audit outcome was unfavorable. The unfavorable outcome consequences suggested the possibility of a lack of client continuance and auditor litigation. Unfavorable results were not a typical audit outcome. The results that relate to ethical sensitivity and auditor judgment were analyzed separately and were partitioned using firm evaluation as the proxy of expertise.

6.3.2 Test of Hypothesis Five

Hypothesis Five predicted that when the outcome of the audit was unfavorable, auditors' ethical sensitivity measured as the number of stakeholder types identified by participants would not be affected by their level of expertise, specifically the ethical sensitivity of experts would not differ from the ethical sensitivity of novices. Outcome, management's intentions and expertise served as the independent variables in the analysis. Table 8 presents the ANOVA findings (see Section 5.5.2 for related treatment means, standard deviations and cell sizes). The outcome x evaluation interaction was significant ($F=17.560$; $p<0.001$). Subsequent analysis using a priori contrasts showed that, as expected, when the outcome consequences were unfavorable, outstanding (expert) participants' mean ethical sensitivity ($mean_{expert}=9.14$) was not significantly different from the mean ethical sensitivity of the average (novice) participants ($mean_{novice}=10.07$), $F=2.48$; $p<0.126$. When outcome consequences were unfavorable, outstanding (expert) and average (novice) participants' ethical sensitivity did not differ. Hypothesis Five was supported.

Although there was no significant difference in the ethical sensitivity between outstanding (expert) participants and average (novice) participants when the outcome consequences were unfavorable, the magnitude of the difference in ethical sensitivity between the unfavorable and favorable outcome treatment groups when comparing outstanding (expert) participants and average (novice) participants was significantly different. The difference between ethical sensitivity in the favorable and unfavorable treatment groups for the outstanding (expert) participants was significantly less when compared to the difference in ethical sensitivity of the average (novice) participants. Specifically the increase in the number of stakeholders identified by outstanding (expert) participants between the unfavorable and the favorable outcome treatment groups ($mean_{favorable}$ 8.90 vs. $mean_{unfavorable}$ 9.14) was significantly less ($p<0.001$) than the decrease in mean ethical sensitivity of the average (novice) participants ($mean_{favorable}$ 6.07 vs. $mean_{unfavorable}$ 10.07). The difference in mean ethical sensitivity of the outstanding (expert) participants was not significantly different ($p<0.143$) between the favorable (mean=8.90) and unfavorable (mean=9.14) outcome treatment groups. The difference in ethical sensitivity of the average (novice) participants was significantly different ($p<0.001$) between the favorable ($mean_{favorable}=6.07$) and the unfavorable ($mean_{unfavorable}=10.07$) outcome treatment groups. The results suggest that outstanding (expert) participants are less susceptible to the effect of an unfavorable outcome. Average (novice) participants however were very susceptible to the effect of an unfavorable outcome. In an environment for which the outcome is known ex-

post, average (novice) participant's ethical sensitivity was typically lower and was only heightened when outcome consequences were unfavorable.

To supplement the analysis of ethical sensitivity, participants were also asked to explicitly indicate the stakeholders identified. Participants identified a wide range of stakeholder types. Table 9 reports the results of analysis of stakeholder types identified for both outstanding (expert) and average (novice) participants. Levine's Test of Equality of Variances showed significant differences for some of the stakeholder types identified by participants. Consequently, Mann-Whitney nonparametric tests of significance were conducted to determine whether the stakeholder types identified differ between experts and novices. When the outcome consequences were unfavorable, the results suggested that the stakeholder types, Other Client, Customers, Financial Institutions, the Audit Profession and Other were significantly different between the outstanding (expert) and the average (novice) participants at the 0.05 significance level. In the unfavorable condition, there were fewer shareholder types who were significantly different between the outstanding (expert) and the average (novice) participants and only Audit Profession and Other were significant in both conditions.

6.3.3 Test of Hypothesis Six

Auditing standards require auditors to assess the intentions of management in the audit process (*CICA Assurance Handbook* Section 5095) and further those standards require different audit procedures depending on those intentions (*CICA Assurance Handbook* Section 5135). Hypothesis Six (a&b) predicted that an

expert's mean ethical sensitivity would be similar to the novices' mean ethical sensitivity when management's intentions were inadvertent and when management's intentions were deliberate. Outcome and management's intentions served as the independent variables. Table 8 presents the ANOVA findings (see Section 5.5 for related treatment means, standard deviations and cell sizes). Similar to the favorable outcome results, the aggregate results indicated that auditors' ethical sensitivity was not significantly influenced by management's intentions ($F=2.284$; $p=0.134$).

The interaction between management's intentions and expertise was significant ($F=12.372$; $p=0.001$). In the deliberate intentions treatment groups, outstanding (expert) participants' mean ethical sensitivity was significantly ($p>0.001$) higher than the mean ethical sensitivity of average (novice) participants (i.e. $mean_{expert}=10.29$ vs. $mean_{novice}=8.00$). In the inadvertent intentions treatment groups, however, outstanding (expert) participants' mean ethical sensitivity was significantly lower ($p<0.001$) than the mean ethical sensitivity of average (novice) participants (i.e. $mean_{expert}=8.00$ vs. $mean_{novice}=12.14$). These results do not provide support for either Hypothesis Six (a) and (b). When outcomes were unfavorable, outstanding (expert) participants' ethical sensitivity was higher than average (novice) participants' ethical sensitivity if management's intentions were inadvertent but lower if management's intentions were deliberate.

The direction and magnitude of the difference between outstanding (expert) and average (novice) participants between the intentions treatments differed. Outstanding (expert) participants mean ethical sensitivity was lower in the

deliberate intentions than in the inadvertent intentions and the magnitude of the shift was moderate ($mean_{inadvertent}$ =9.445 vs. $mean_{deliberate}$=8.570 = $difference_{expert}$=0.875). In contrast, the average (novice) participants mean ethical sensitivity was higher in the deliberate intentions treatment than in the inadvertent intentions treatment and the magnitude of the difference was significantly ($p<0.001$) large ($mean_{inadvertent}$=6.93 vs. $mean_{deliberate}$=9.195 = $difference_{novice}$=2.265). The three-way interaction among management's intention, outcome and firm evaluation is significant ($F=13.030$; $p<0.001$). The interaction is driven by outstanding (expert) participants who identified significantly fewer stakeholder types ($mean_{deliberate}$=8.00) than did the average (novice) auditors ($mean_{deliberate}$=12.14) when management's intentions were deliberate and outcomes were unfavorable. Further outstanding (expert) participants' mean ethical sensitivity measured as the number of stakeholder types identified was the lowest ($mean_{deliberate}$=8.00) relative to the mean ethical sensitivity of all other treatment conditions. In contrast, the average (expert) participants' mean ethical sensitivity measured as the number of stakeholder types identified was the highest ($mean_{deliberate}$=12.14) relative to the mean ethical sensitivity of all other treatment conditions. The average (novice) participants appear to react very strongly to the interaction of the deliberate intentions and negative outcome while the outstanding (experts) participants reacted in the opposite direction.

6.3.4 Test of Hypothesis Seven

Hypothesis Seven predicts that outstanding (expert) auditors' evaluative judgments of other auditors' ethical judgments would not differ from than the evaluative judgment of the average (novice) auditors when the outcome consequences were unfavorable. Outcome, management's intentions and expertise served as the independent variables in the analysis. Table10 presents the ANOVA results (see Section 5.5.3 for related treatment means, standard deviations and cell sizes). The outcome x expertise interaction was significant for the assessment of the appropriateness for the "Other Client" ($F=8.727$; $p=0.004$) but insignificant for the assessment of appropriateness for the "Problematic Client" ($F=0.419$; $p=0.519$). When the outcome consequences were unfavorable, for the "Problematic Client" the difference in the assessment of the appropriateness of auditor judgment between outstanding (expert) and average (novice) participants was insignificant ($p=0.134$) however for the "Other Client" the difference between outstanding (expert) and average (novice) participants was significant ($p=0.004$). Hypothesis Seven was partially supported. Further, the outstanding (expert) participants' confidence in their assessments was generally higher than was the confidence of average (novice) participants' confidence (see Table 11). Also, outstanding (expert) participants confidence changed minimally between the favorable and the unfavorable treatment conditions while the average (novice) participants confidence changed significantly ($P<0.014$) between the favorable and the unfavorable treatment groups.

---Insert Table 12-----

To supplement the evaluative judgment analysis, participants were asked to make a selection from a list of possible auditor actions. An analysis of the difference between outstanding (expert) and average (novice) participants' selection of the appropriate auditor decision was completed using non parametric tests of significance because the selections were categorical in nature. When the outcome was unfavorable Table11 reports that there was no significant difference between expert and novice auditors' selection of the appropriate auditor judgment. However the predictions of what other auditors would accept varied considerably more for the average (novice) participants (see Table 5) than for the outstanding (expert) participants. Average (novice) participants in the unfavorable outcome treatment group demonstrated no clear prediction about what selection other auditors would accept and further were indecisive about what selection they would accept.

Table10 also reports the main effects of the independent variables, outcome, management's intentions and firm evaluation. The main effect of outcome was significant for the audit opinion issued for the "Problematic Client" ($F=24.187$; $p<.001$) and was also significant for the audit opinion issued for the "Other Client" ($F=8.285$; $p<.005$). A priori contrasts reveal that, as expected, the direction of the difference was significantly ($P<0.001$) less appropriate in the unfavorable outcome consequences condition as compared to the favorable outcome consequences condition for both opinions. The outcome consequences affected the assessment of auditors' judgment appropriateness. Unfavorable outcomes evoked less favorable assessments of auditors' ethical judgments than did favorable outcomes. Further, the results indicated that auditors' assessments of the appropriateness of auditor

judgment to issue unqualified opinions was not significantly influenced by management's intentions ($F_{Problematic\ client}$=2.110; p=0.149 and $F_{Other\ client}$=1.654; p=0.201) or evaluation ($F_{Problematic\ client}$=2.882; p=0.092 and $F_{Other\ client}$=1.299; p=0.257) for both auditor decisions. For evaluations of the appropriateness of the "Problematic Client" and "Other Client", outstanding (expert) participants and average (novice) participants differed directionally in their appropriateness measures. For the "problematic" client, although the mean appropriateness rating was higher for the outstanding (expert) participants than the average (novice) participants, the difference between inadvertent and deliberate intentions was in the opposite direction in comparing the outstanding (expert) and average (novice) participants. For the "Other Client", similarly the mean appropriateness rating was generally higher for the outstanding (expert) participants than the average (novice) participants, the difference between inadvertent and deliberate intentions was in the opposite direction in comparing the outstanding (expert) and average (novice) participants and further was in the opposite direction when comparing the results of analysis for the "Problematic Client". The three-way interaction among management's intention, outcome and firm evaluation is significant (F=5.161; p=0.025) but only for the "Other Client". The interaction is driven by average (novice) participants who assessed the appropriateness of the auditor's decision to issue an unqualified opinion for the client who unknowingly overvalued an asset ($mean_{unfavorable}$=2.00) significantly as less inappropriate when the outcome was unfavorable than when the outcome was favorable ($mean_{favorable}$=3.00) when management's intentions were inadvertent. In all other treatment groups the

unfavorable outcome condition elicited a higher or similar but not lower inappropriateness rating than in the favorable outcome condition. Both knowledge of management's intentions and firm evaluation did not significantly affect auditors' assessment of the appropriateness of auditors' judgments. Hypothesis Seven was not supported.

6.3.5 Test of Hypothesis Eight

Hypothesis Eight predicted that when outcome consequences were unfavorable, expert auditors' assessment of sanctions against another auditor would not differ from the assessment of sanctions by novice auditors. Peer review is an institutionalized process within the profession for which there are established guidelines. In this study's experimental task, participants were asked to assess the appropriate sanctions from exonerate (1) and cancel or resignation of the Chartered Accountant designation (6) to be levied against the auditor in the experimental scenario. The auditor in the experimental task scenario made two decisions (i.e. one for each of the clients) and both decisions were to issue unqualified opinions.

ANOVA results are presented in Table 13. Outcome, management's intentions and expertise served as the independent variables in the analysis. The results indicated that the interaction between outcome and firm evaluation was significant for the assessment of sanctions against the auditor for both the audit opinion issued for the "Problematic Client" ($F=7.523$; $p=0.007$) and for the audit opinion issued for the "Other Client" ($F=20.715$; $p<0.001$). The assessments of sanctions significantly differed between the unfavorable and favorable outcome

treatment groups for outstanding (expert) and average (novice) participants. In the unfavorable outcome treatment groups, mean sanctions for outstanding (expert) participants ($mean_{expert}$=3.63; std dev=1.245) and for average (novice) participants ($mean_{average}$=4.64; std dev=1.660) were significantly different. Interestingly, the difference in average (novice) participants' mean sanctions between the favorable and the unfavorable outcome treatments (2.67 vs. 4.64) was significantly larger ($p<0.001$) than the difference in mean sanctions of outstanding (expert) participants' between outcome conditions (3.03 vs. 3.63). A similar pattern of results occurred in an analysis of the sanctions levied against the auditor who issued an unqualified opinion for the "Other Client". Hypothesis Eight is not supported. Outstanding (expert) and average (novice) participants' assessment of sanctions against the auditor differ when the outcome is unfavorable.

Table 13 also reports the main effects of the independent variables outcome and management's intentions. The main effect of outcome was significant for the determination of sanctions against the auditor for both the decision to issue an unqualified opinion for the "Problematic Client" ($F=30.822$; $p<0.001$) and for the decision to issue an unqualified opinion for the "Other client" ($F=34.129$; $p<0.001$). A priori contrast revealed that, as expected, the direction of the difference was toward harsher sanctions in the unfavorable outcome condition than the favorable outcome condition for the issue of both opinions. The outcome did affect the assessment of sanctions against the auditor. Unfavorable outcomes evoked harsher sanctions against auditors than did favorable outcomes which could have a deleterious effect on sanctions levied against auditors who should be assessed on an

ex ante not on an ex-post basis. Results indicated that the auditors' assessments of sanctions against the other auditor were not significantly influenced by management's intentions for the decision to issue an unqualified opinion for the "problematic" client ($F=0.860$; $p=0.356$). However, auditors' assessments of sanctions against the auditor were significantly influenced by management's intentions for the decision to issue an unqualified opinion for the "Other Client" ($F=8.739$; $p<0.000$). The three-way interaction among management's intention, outcome and firm evaluation is significant ($F=19.118$; $p<0.001$) but only for the "Problematic Client". The interaction is driven by the average (novice) participants who assessed similar sanctions against the auditor who had issued an unqualified opinion for the client who knowingly overvalued an asset (i.e. deliberate intentions) when the outcome was unfavorable ($mean_{unfavorable}=3.29$) and favorable ($mean_{favorable}=3.25$). In all other treatment groups for both outstanding (expert) and average (novice) participants, the unfavorable outcome condition elicited a significantly higher sanction assessment against the auditor than in the favorable outcome condition.

6.4 Ancillary Analysis

6.4.1 Analysis of Experimental Demand Bias

A concern that the questionnaire's design which asked participants to identify stakeholder types who should have been considered in the auditor's decision to issue unqualified opinions for both clients may have significantly affected the subsequent evaluative judgment results was addressed by a separate

experimental participant sample. Anderson et al (1997) in a study of the effect of outcome knowledge on judges' evaluation of auditor judgment investigated the debiasing effect of considering alternate stakeholders. The results of their study suggest that considering alternate stakeholders debiased the effect of outcome. Although the experimental task and the subject type differed in this study, to determine if the identification of affected shareholders experimental task caused a response bias in participants' evaluative judgments, a sample of 24 auditors from three offices of two national accounting firms located in Toronto, Calgary and Vancouver were asked through three contact partners to complete the experimental instrument. Those experimental instruments were prepared with the requirement to identify stakeholders removed from both the questions following the experimental tasks and also the Information Sheet and Consent Form. The experimental materials and process was otherwise the same for the sample of 24 auditors as it was for the main participant sample.

Analysis of results investigating any significant differences in responses by treatment group are displayed in Table 14 and demonstrated no significant differences in the appropriateness of judgment, selection of appropriate auditor action and determination of auditor sanctions responses comparing across all four treatment groups between sample groups. The identification of stakeholder type experimental task did not significantly affect participants' responses to subsequent evaluative judgment tasks in the experimental materials.

------ Insert Table 14 ------

7 DISCUSSION

7.1 INTRODUCTION

The conceptualization of auditor expertise has evolved from a focus on technical knowledge to a broader conceptualization that includes various personal attributes such as leadership and communication skills (Abdolmohammadi et al 2004; Abdolmohammadi and Shanteau 1992), as well as social and inter-personal dimensions such as the ability to assess the technical knowledge and preferences of other auditors (Tan and Jamal 2006; Moreno and Bhattacharjee 2003; Tan and Trotman 2003; Jamal and Tan 2001; Tan and Jamal 2001; Kennedy and Peecher 1997; Ponemon 1995).

This study investigated whether a sensitivity to a wide variety of potential stakeholders is a dimension of auditor expertise. A sensitivity to multiple stakeholders is a component of the process labeled ethical sensitivity which is one of the psychological processes that culminates in ethical judgment. Using Rest's (1984) model of ethical judgment as a framework for investigation, experts' sensitivity to stakeholders was investigated. Further, this study examined ethical sensitivity and judgment in the context of management's intentions and outcome. The collective results of the descriptive analysis (Chapter 5) and statistical analysis (Chapter 6) are discussed in this chapter.

7.2 Broadening the Conceptualization of Auditor Expertise

The expertise literature has both modeled and investigated various dimensions of auditor expertise. The consequence of those investigations is a broadening conceptualization of auditor expertise. Examining ethical sensitivity as an extension of that broadening conceptualization incorporates dimensions other than technical competencies and acknowledges ethical judgment as a dimension of expertise. Ethical sensitivity is the issue recognition process in the ethical judgment process (Rest 1984). This study focused minimally on the recognition of stakeholders as the measure of ethical sensitivity. Recognition of stakeholders is important in an audit environment as auditors are responsible to consider all affected stakeholders in their decision.

Prior research studies (Moreno and Bhattacharjee 2003; Tan and Trotman 2003; Jamal and Tan 2001; Tan and Jamal 2001; Kennedy and Peecher 1997; Tan and Libby 1997; Ponemon 1995) empirically examining inter-personal sensitivity as a dimension of auditor expertise. These studies focused on a limited number of stakeholders who are directly involved in the audit process either as part of the audit team (i.e. peers, subordinates, superiors) or as client management. Models of the audit environment characterize the audit environment as a multiple stakeholder environment with a stakeholder scope larger than that previously investigated (Gibbins et al, 2001; Gibbins and Newton 1994; Gaa 1993). This study extends the stakeholder sensitivity dimension of auditor expertise by demonstrating that sensitivity to stakeholders extends beyond the limited stakeholders included in prior studies. More importantly this study demonstrates that a sensitivity to stakeholders,

labeled ethical sensitivity in Rest's (1984) model of ethical judgment, is a dimension of expertise. Differences in firm evaluation, this study's proxy for expertise, affected ethical sensitivity measured in this study as the identification of stakeholder types. Auditors identified by their firm's evaluation system as outstanding (expert) were more ethically sensitive than were auditors identified by their firm evaluation process as demonstrating average (novice) performance. Ethical sensitivity is affected however by the outcome consequences and in part by management's intentions.

The range of shareholder types identified was similar across participant types (i.e. expert and novice). The most frequently cited stakeholder types for all participants were shareholders, client management and financial institutions. Shareholders and financial institutions provide funds for investment, shareholders appoint the auditor and the auditor negotiates with the management. These stakeholders are proximate to auditors and their identification is consistent with expectations in the behavioral literature (Bazerman et al 1997; Jones 1991; Rest 1984). The majority of auditors identified by their firm evaluations as being outstanding identified shareholders as an affected stakeholder while only half of the average (novice) participants identified shareholders as affected stakeholders.

The effect of expertise on the judgments of auditors in a peer review context reveals interesting attributes of experts. Outstanding (expert) participants assessed the judgment to issue unqualified opinions for the clients in the scenario as more inappropriate than did average (novice) participants. Commensurate with that assessment, outstanding (expert) auditors levied harsher sanctions against the

auditors in the scenario and more often recommended a qualification of the audit opinion than did average (novice) auditors. Outstanding (expert) auditors' evaluative judgments are more consistent with stakeholder preferences (with the possible exception of management) than are average (auditors) evaluative judgments.

7.3 The Outcome Effect

The results of this study confirm the robustness of the effect of outcome on judgment and the cognitive processes that produce judgment. Prior research has demonstrated the robustness of the outcome effect on evaluative judgments (Baron and Hershey 1990; Kennedy 1995). This study also demonstrates the asymmetric impact of outcome on ethical sensitivity and judgment. Novice auditors were very affected by outcome consequences such that unfavorable consequences caused their ethical sensitivity to stakeholders to increase. When the outcome was unfavorable, stakeholders become more salient (Jones 1991) and novice auditors were more sensitive to a wider range of stakeholders than when the consequences were favorable. Expert auditors were not susceptible to the impact of an unfavorable outcome. The ethical sensitivity and evaluative judgments of expert auditors were similar in both the favorable and unfavorable outcome conditions. Although auditors make judgments in a context without outcome, in a peer review context knowledge of an unfavorable outcome heightens auditor's sensitivity to stakeholders for novice auditors only. Novice auditors' range of stakeholder type consideration is more narrow when outcomes are favorable than when they are

unfavorable which is inconsistent with the process orientation of professional auditing standards.

This study also demonstrates the impact of outcome on evaluative judgments and the assessment of sanctions against an auditor in a peer review context. The results of this study confirmed that bias for novice auditors only. Susceptibility to the effect of outcome is problematic in both the judicial system and peer review process. Auditing standards are process oriented and decision quality is based on decision process and is not driven by the resultant outcome consequences. Since experts are less susceptible to the bias of the outcome effect, an expert's evaluative judgment may protect the auditor and the auditing profession from the potential of deleterious consequences in a peer review context. Although auditors are familiar with auditing standards process orientation, novice auditors are subject to the robust effect of outcome in a peer review context. When outcome consequences were unfavorable, novice auditors' ethical sensitivity was higher, their assessments of judgment appropriateness were lower, their confidence in the determination of appropriateness was lower, their selections of the appropriate alternative lacked consensus, their predictions of what other auditors would select were indecisive and their assessments of sanctions were harsher than when compared to when the outcome consequences are unfavorable. Expert auditors' assessments of appropriateness, confidence in appropriateness determination, selection of alternatives, predictions of what other auditors would select and assessments of sanctions however did not differ when consequences were favorable compared to

when the outcome consequences were unfavorable thus demonstrating a lack of susceptibility to the robust effect of outcome.

7.4 Sensitivity to Management's Intentions

The results of this study suggested that management's intentions marginally affected auditors' ethical sensitivity and also affect auditors' evaluative judgments. These results are somewhat consistent with the expectations of both auditing standards, stakeholders and models of ethical judgment. The popular business press is riddled with suggestions that the auditor either misinterprets or ignores management's intentions (i.e. Enron, Tyco) to the detriment of other stakeholders' welfare, interests and expectations. As an assessment of management's intentions is required by GAAS (*CICA Assurance Handbook Section 5190*), such an assessment should direct the auditor's risk assessment and audit planning processes (*CICA Assurance Handbook* section 5135).

Although stakeholders expect auditors to provide a greater level of assurance for the detection of intentional misstatements than unintentional misstatements (Epstein and Geiger 1994), auditing standards require auditors to be sensitive to management's intentions but do not provide for the same audit risk assessment for a misstatement from fraudulent intentions as is provided for an equally unintentional misstatement (*CICA Assurance Handbook* Section 5135; Arens et al 2007). A sensitivity to stakeholders has been demonstrated as a dimension of an evolving concept of auditor expertise. Sensitivity to stakeholders' intentions including

management's intentions may be associated with expertise however the results of this study are mixed and are consequently inconclusive.

8 CONCLUSION

8.1 SUMMARY OF RESULTS

Using a between-subjects experimental design, this study investigated the impact of expertise and factors germane to producing judgments in an auditing environment (i.e. outcome consequences and management's intentions) on the ethical sensitivity and judgment of auditors. The results suggest that ethical sensitivity, operationalized as the recognition of affected stakeholders, is a dimension of auditor expertise. Further the contextual factor outcome has a robust effect on both the ethical sensitivity and judgment of novice auditors only. Management's intentions had a mixed effect on ethical sensitivity and evaluative judgments.

8.2 IMPLICATIONS OF THE STUDY

This study has three main contributions to our understanding of auditor expertise. First, the study examined sensitivity to stakeholders as a dimension of an expanded conceptualization of auditor expertise. Professional auditing standards require both technical competency and an ethical responsibility to consider all affected and interested stakeholders in the discharge of professional responsibilities (*CICA Assurance Handbook* Section 5025; Mautz and Sharaf 1961). Recent findings in the auditing literature have demonstrated that various interpersonal

dimensions not just technical knowledge distinguish experts in auditing. As the auditing environment is interpersonal in nature, demonstrating a sensitivity to various stakeholders to whom the auditor is accountable as a dimension of expertise further extends the stakeholder sensitivity dimension of the concept of auditor expertise. The accounting profession has come under the scrutiny of the public as a result of well publicized audit failures like Enron which arouse the public's interest in the professional behavior of auditors. These scandals have led some psychologists to argue against the possibility of auditor objectivity in considering these other stakeholders (e.g. Bazerman and Loewenstein 2001; Bazerman et al 1997). Despite these concerns, the results of this study suggest that expert auditors are indeed sensitive to the multitude of the stakeholders to whom they are accountable and suggestions that stakeholder scope is narrow with a focus on the client is not supported by this study.

Second, the outcome literature has demonstrated the robustness of the outcome effect on juror, judges and students. Persistence of an outcome effect on jurors, judges and auditors has deleterious consequences for auditors and others involved in either the judicial system or the peer review process following an audit failure. Auditing standards, like the law, require process not outcome considerations to guide deliberations of audit quality (Kadous 2001). Prior research has not investigated the effect of outcome on auditors in a peer review context or the judicial system. This study extends our understanding of the outcome effect on auditors' recognition of the various stakeholders to whom they are accountable and

the effect of outcome on auditors' evaluations of other auditors in a peer review context.

Novice auditors with knowledge of the process orientation of auditing standards by virtue of their education, training and experience are biased by the knowledge of outcome when the consequences are unfavorable. Expert auditors however appear less susceptible than novices to the bias of outcome knowledge. Audit quality should be evaluated according to the audit planning and procedures implemented not by the outcome of an audit. Auditors must attest to the fairness of the financial statements and perform and plan an audit without knowledge of outcome. If auditors can not expect to be evaluated on their audit process, then the process of auditing becomes irrelevant when a business or an audit failure occurs. The peer review process and ultimately the judicial system need to find a mechanism for change in order to allow appropriate evaluations of auditors' judgments. Various debiasing strategies have been empirically tested with inconsistent results and impractical suggestions (e.g. do not provide the jurors with outcome knowledge). Proposed mechanisms included asking jurors to consider the auditor's responsibility to other stakeholders (Anderson et al 1997) and asking jurors to consider positive outcomes that could have resulted form the same antecedent events (Lowe and Reckers 1994; Anderson et al 1997). These mechanisms are problematic in that they do not reliably eliminate outcome effects and may lead the juror to be more lenient toward the auditor (Kadous 2001). An investigation of debiasing strategies in an auditor peer review context needs to be reconsidered and further auditors participating in debiasing strategies studies of the

outcome effect need to be partitioned into novice and experts. Auditors who complain about being misunderstand may have a valid complaint if being evaluated by novice auditors. To protect auditors against the deleterious consequences in a peer review context, experts should be consulted in auditor judgment evaluations.

Third, although users and regulators expect auditors to provide a greater level of assurance for the detection of fraud than unintentional misstatements (Epstein and Geiger 1994), auditing standards do not provide for the same degree of assurance for the detection of material intentional error as is provided for an equally material unintentional error (*CICA Assurance Handbook* Section 5135; Arens et al 2007). Management's intentions should matter in evaluating auditor judgment (*CICA Assurance Handbook* Section 5095). The current auditing literature on management's intentions has not demonstrated the impact of those intentions on auditor ethical sensitivity and judgment. This study extends our current understanding of auditors' sensitivity to management's intentions by demonstrating a limited sensitivity to management's intentions in the judgment process.

8.3 Limitations of the Study and Future Research Direction

One limitation of the experiment is that the measure of ethical sensitivity captures only a component of the psychological process labeled ethical sensitivity (Rest 1984). The measure of ethical sensitivity used in this study is the number of stakeholder types recognized by the participants. Rest (1984) conceptualized ethical sensitivity as a very complex psychological process. Ethical sensitivity involves making "some sort of interpretation of the particular situation in terms of what

actions are possible, who (including self) would be affected by each course of action, and how the interested parties would regard such effects on their welfare" (Rest 1986, p. 3). Although Rest indicated that minimally a person realizes that he could do something to affect the interests, welfare or expectations of others, the conceptualization and subsequent operationalization of ethical sensitivity in this study was distilled down to the identification of affected shareholders thereby capturing only one aspect of ethical sensitivity. Future research might investigate the other components of the psychological process of ethical sensitivity.

As with behavioral experiments in general, this experiment is subject to other inherent limitations. Although that sample is diverse in terms of geographic location and accounting firm, this study involved a limited sample of auditors. The random sample of participants does not consider the total population of auditors. Also, auditors work in a much richer information environment than provided in the experimental scenario. Although no case can provide the participants with all the information they may want to have, the objective was to provide enough information to depict a realistic scenario given the experimental nature of the materials provided to participants and the time practicalities.

Table 1

Demographic Descriptives of Participants by Treatment Group

Demographic		*Favorable Outcome*		*Unfavorable Outcome*	
Variables[a]	*Category*	*Inadvertent*	*Deliberate*	*Inadvertent*	*Deliberate*
N (128)		33	31	33	31
Age (in years)		29.9	28.6	29.2	28.2
Gender	Male (N=82)	24%	35%	10%	30%
	Female (N=46	28%	4%	54%	13%
Rank at Firm	Senior (N=63)	27%	24%	25%	24%
	Manager (N=65)	25%	25%	26%	25%
Firm Evaluation[b]	Outstanding (N=66)	26%	24%	26%	24%
	Average (N=62)	26%	24%	26%	24%
No. of Years in the Profession		7.1	6.4	6.0	5.1
Annual Billable Hours	<1500 hours	13%	29%	36%	23%
	> 1500 hours	48%	17%	8%	27%
P-score[c]		41.6	40.6	44.3	42.1

[a] Mean number or proportion of participants by treatment group.

[b] Evaluations of participants as outstanding and average were provided by the participating firm contact partners and are based on firm evaluation.

[c] P-score determined from post-experiment DIT questionnaire (Rest 1979).

Table 2
Results of Analyses of Manipulation Checks of Outcome Consequences and Management's Intentions

Manipulation	*Treatment Levels*[a]	*Mean*	*Z-statistic*	*p-value*
Outcome Consequences	Favorable	5.03	-3.350	p<0.001
	Unfavorable	6.67		
Management's Intentions	Inadvertent	4.72	-5.404	p<0.001
	Deliberate	7.11		

[a] For manipulation checks of both variables, participants responded on a Likert scale anchored by 1 and 9. For the outcome consequences manipulation, the anchors 1 and 9 corresponded to favorable outcome and unfavorable outcome respectively. For the management's intentions manipulation, the anchors 1 and 9 corresponded to inadvertent misstatement and deliberate misstatement respectively.

Table 3

Mean (standard deviation of) Ethical Sensitivity[a] Partitioned by Firm Evaluation[b]

	Favorable Outcome			*Unfavorable Outcome*			*Intentions*
	Outstanding[b]	*Average*[b]	*Total*	*Outstanding*[b]	*Average*[b]	*Total*	*Total*
Inadvertent	8.67	5.86	7.31	10.29	8.00	9.14	8.21
Intentions	(1.589)	(1.562)	(2.106)	(1.490)	(3.113)	(2.663)	(2.548)
	n=17	n=16	n=33	n=17	n=16	n=33	n=66
Deliberate	9.14	6.25	7.60	8.00	12.14	10.07	8.79
Intentions	(2.797)	(1.693)	(2.673)	(3.328)	(2.958)	(3.741)	(3.437)
	n=16	n=15	n=31	n=16	n=15	n=31	n=62
Outcome	8.90	6.07	7.46	9.14	10.07	9.61	
Total	(2.226)	(1.617)	(2.395)	(2.785)	(3.651)	(3.251)	
	n=33	n=31	n=64	n=33	n=31	n=64	

[a] Mean ethical sensitivity was measured as the aggregate number of stakeholder types identified by the study's participants for the "Problematic Client" (space was provided to identify up to 10 stakeholders), and the " Other Client" (again up to 10 stakeholders could be identified). Participants were also allowed to add additional stakeholders for each case if they wanted to, though no participant did that.

[b] Evaluations of participants as outstanding and average were provided by the participating firm contact.

Table 4
Stakeholder Type Identification Frequency
Partitioned by Firm Evaluation

Stakeholder Type[a]	*Outstanding (Expert n=66)*[b]			*Average (Novice n=62)*[b]		
	Favorable[c]	*Unfavorable*[c]	*Total*	*Favorable*[c]	*Unfavorable*[c]	*Total*
Shareholders	62	46	108	34	34	68
Client Management	39	37	76	15	38	53
Other Client	30	15	45	27	39	66
Suppliers	16	25	41	18	27	45
Employees	29	33	62	7	34	41
Auditors (in scenario)	4	12	16	0	12	12
Creditors	16	14	30	8	7	15
Financial Institutions	23	43	66	34	32	66
Customer	12	37	49	7	20	27
Community	34	21	55	34	29	63
Board of Directors	16	0	16	0	4	4
CCRA[d]	7	26	33	0	19	19
Regulators	0	0	0	12	0	12
Audit Profession	4	0	4	0	14	14
Other[e]	4	12	16	0	2	2
General Public	0	4	4	0	6	6
	296	325	621	196	317	513

[a] Represents of number of participants who identified the respective stakeholder types. Stakeholder types or categories were provided in participants' responses

[b] Evaluations of the participants as outstanding and average were provided by the participating firm contact partner.

[c] The aggregate number of stakeholders identified for both clients of the auditor in the experiment's scenario.

[d] Denotes Canada Customs and Revenue Agency now renamed Canada Revenue Agency (CRA).

[e] Other category is used for those stakeholders who were identified only once or for stakeholders for whom it was unclear what shareholder was being identified.

Table 5

Mean (standard deviation of) Appropriateness[a] of Auditor Judgment Partitioned by Firm Evaluation[b]

Panel A: Mean (standard deviation of) Appropriateness[a] of Auditor Judgment - Problematic Client[c]

	Favorable Outcome			*Unfavorable Outcome*			*Intentions*
	Outstanding	*Average*	*Total*	*Outstanding*	*Average*	*Total*	*Total*
Inadvertent	3.33	3.79	3.55	4.93	4.00	3.96	3.75
Intentions	(1.345)	(1.051)	(1.213)	(0.616)	(0.250)	(0.429)	(0.931)
	n=17	n=16	n=33	n=17	n=16	n=33	n=66
Deliberate	4.00	2.75	3.33	4.86	4.43	4.64	3.97
Intentions	(0.961)	(1.342)	(1.322)	(0.363)	(0.514)	(0.488)	(1.199)
	n=16	n=15	n=31	n=16	n=15	n=31	n=62
Outcome	3.66	3.23	3.44	4.39	4.21	4.30	
Total	(1.203)	(1.305)	(1.263)	(0.685)	(0.418)	(0.570)	
	n=33	n=31	n=64	n=33	n=31	n=64	

Panel B: Mean (standard deviation of) Appropriateness[a] of Auditor Judgment - Other Client[d]

	Favorable Outcome			*Unfavorable Outcome*			*Intentions*
	Outstanding	*Average*	*Total*	*Outstanding*	*Average*	*Total*	*Total*
Inadvertent	2.47	3.00	2.72	3.93	2.00	2.84	2.84
Intentions	(1.506)	(1.038)	(1.306)	(0.805)	(0.609)	(1.130)	(1.218)
	n=17	n=16	n=33	n=17	n=16	n=33	n=66
Deliberate	2.43	2.75	2.60	3.71	3.71	3.71	3.14
Intentions	(1.742)	(1.342)	(1.522)	(1.204)	(1.541)	(1.357)	(1.538)
	n=16	n=15	n=31	n=16	n=15	n=31	n=62
Outcome	2.45	2.87	2.66	3.82	2.86	3.34	
Total	(1.594)	(1.196)	(1.409)	(1.011)	(1.380)	(1.294)	
	n=33	n=31	n=64	n=33	n=31	n=64	

[a] The participants were asked to rate the appropriateness of the auditor's decision to issue an unqualified opinion on a 5 point scale where 1= "Very Appropriate" and 5 = "Very Inappropriate" for each audit client.

[b] Evaluations of participants as outstanding and average was provided by the participating firm contact partners.

[c] Problematic Client was the client in the scenario who either inadvertently or deliberately overvalued an asset.

[d] Other Client was the client in the scenario who was either inadvertently or deliberately affected by the Problematic Client.

Table 6

Selection Frequency (percentage) of Appropriate Auditor Judgment and Prediction Frequency (percentage) by Other Auditors Partitioned by Outcome Consequences

Panel A: Problematic Client [a]

		Outstanding[b]					*Average*[b]				
		1[c]	2[d]	3[e m]	4[f]	5[g]	1[c]	2[d m]	3[e]	4[f]	5[g m]
Favorable	Frequency	4	23	4	2	0	12	19	0	0	0
	% Selection	12%	69%	12%	6.%	0%	38%	61%	0%	0%	0%
	Predicted % Selection	23%	41%	23%	10%	2%	37%	43%	12%	5%	2%
Unfavorable	Frequency	1	23	9	0	0	0	18	13	0	0
	% Selection	3%	69%	27%	0%	0%	0%	58%	41.94%	0%	0%
	Predicted % Selection	13%	28%	12%	17%	7%	12%	50%	15.29%	14%	14%
Total		5	46	13	2	0	12	37	13	0	0
		8%	72%	20%	3%	0%	19%	58%	20%	0%	0%

Panel B: Other Client [l]

		1[h]	2[i m]	3[j]	4[k]	1[h m]	2[i]	3[j m]	4[k m]
Favorable	Frequency	18	8	2	5	25	0	0	6
	% Selection	54%	24%	6%	15%	80%	0%	0.00%	19%
	Predicted % Selection	60%	19%	6%	14%	71%	2%	5.71%	21%
Unfavorable	Frequency	16	15	0	2	8	15	4	4
	% Selection	48%	45%	0%	6%	25%	48%	12.90%	13%
	Predicted % Selection	44%	16%	5%	10%	25%	21%	26%	28%
Total	Frequency	34	23	2	7	33	15	4	10
	% Selection	53%	36%	3%	11%	52%	23%	6%	16%

[a] Problematic Client was the client in the scenario who either inadvertently or deliberately overvalued an asset.

[b] Evaluations were provided by firm contact person.

[c] Numbered alternative corresponds to: Issue an unqualified opinion

[d] Numbered alternative corresponds to: Issue a qualified opinion

[e] Numbered alternative corresponds to: Resign

[f] Numbered alternative corresponds to: Bury an allowance for overpricing

[g] Numbered alternative corresponds to: Report to regulator

[h] Numbered alternative corresponds to: Issue an unqualified opinion

[i] Numbered alternative corresponds to: Writedown without disclosure

[j] Numbered alternative corresponds to: Writedown with disclosure

[k] Numbered alternative corresponds to: Resign

[l] Other Client was the client in the scenario who was either inadvertently or deliberately affected by the Problematic Client.

[m] Experts and novices different at the $p<0.05$ significance level.

Table 7

Mean (standard deviation of) Assessment of Appropriate Auditor Sanctions Partitioned by Firm Evaluation[a]

Panel A: Mean[b] (standard deviation of) Appropriate Auditor Sanction[b] - Problematic Client[c]

	Favorable Outcome			*Unfavorable Outcome*			*Intentions*
	Outstanding	*Average*	*Total*	*Outstanding*	*Average*	*Total*	*Total*
Inadvertent	2.53	2.00	2.28	3.07	6.00	4.54	3.39
Intentions	(1.407)	(0.000)	(1.032)	(1.328)	(0.000)	(1.753)	(1.820)
	n=17	n=16	n=33	n=17	n=16	n=33	n=66
Deliberate	3.57	3.25	3.40	4.40	3.29	3.75	3.56
Intentions	(1.555)	(1.983)	(1.773)	(0.516)	(1.326)	(1.189)	(1.583)
	n=16	n=15	n=31	n=16	n=15	n=31	n=62
Outcome	3.03	2.67	2.85	3.63	4.64	4.17	
Total	(1.546)	(1.561)	(1.552)	(1.245)	(1.660)	(1.556)	
	n=33	n=31	n=64	n=33	n=31	n=64	

Panel B: Mean (standard deviation of) Appropriate Auditor Sanction[b] - Other Client[d]

	Favorable Outcome			*Unfavorable Outcome*			*Intentions*
	Outstanding	*Average*	*Total*	*Outstanding*	*Average*	*Total*	*Total*
Inadvertent	1.93	1.71	1.83	2.43	5.00	3.71	2.75
Intentions	(1.483)	(0.469)	(1.071)	(1.016)	(0.000)	(1.487)	(1.596)
	n=17	n=16	n=33	n=17	n=16	n=33	n=66
Deliberate	1.71	1.75	1.73	1.80	3.14	2.58	2.11
Intentions	(1.069)	(1.342)	(1.202)	(0.789)	(1.956)	(1.692)	(1.488)
	n=16	n=15	n=31	n=16	n=15	n=31	n=62
Outcome	1.83	1.73	1.78	2.17	4.07	3.19	
Total	(1.256)	(1.015)	(1.131)	(0.963)	(1.654)	(1.669)	
	n=33	n=31	n=64	n=33	n=31	n=64	

[a] Evaluations of participants as outstanding and average were provided by the participating firm contact.

[b] Appropriate sanction was measured on a 6 point Likert scale where 1 = exonerate and 6 = loss of designation.

[c] Problematic Client was the client in the scenario who either inadvertently or deliberately overvalued an asset.

[d] Other Client was the client in the scenario who was either inadvertently or deliberately affected by the Problematic Client.

Table 8
ANOVA Model for Ethical Sensitivity[a]

Source of Variation	*Sum of Squares*	*df*	*Mean Squares*	*F-Value*	*p-value*
Outcome	129.904	1	306.906	22.263	0.000
Management Intention	13.325	1	10.391	2.284	0.134
Firm Evaluation[b]	26.510	1	74.113	4.543	0.035
Outcome x Intention	1.751	1	33.286	0.300	0.585
Outcome x Evaluation	102.461	1	89.834	17.560	0.000
Intention x Evaluation	72.188	1	11.917	12.372	0.001
Three-way Interaction	76.030	1	36.476	13.030	0.000

[a] Ethical sensitivity was measured as the aggregate number of stakeholder types identified for both clients.
[b] Evaluations of participants as outstanding and average were provided by the participating firm contact partner.

Table 9
Results of Analyses Comparing Experts' and Novices' Stakeholder Type Identification Partitioned by Outcome Consequences

	Favorable[b]		*Unfavorable*[b]	
Stakeholder Type[a]	*Z-statistic*	*p-value (two-tailed)*	*Z-statistic*	*p-value (two-tailed)*
Shareholders	-4.078	0.000	-1.199	0.231
Client Management[e]	-3.691	0.000	-0.513	0.608
Other Client[e]	-0.212	0.832	-4.179	0.000
Suppliers	-0.169	0.866	-0.921	0.357
Employees[e]	-4.127	0.000	-0.600	0.548
Auditors (in scenario)	-1.382	0.167	-0.067	0.946
Creditors	-1.335	0.182	-0.929	0.353
Financial Institutions[e]	-2.343	0.019	-1.798	0.072
Customers[e]	-0.409	0.683	-2.316	0.021
Community	-0.483	0.629	-1.463	0.143
Board of Directors	-2.908	0.004	-1.471	0.141
CCRA[c]	-2.237	0.025	-0.987	0.324
Regulators	-2.634	0.008	0.000	1.000
Audit Profession	-1.382	0.017	-2.870	0.004
Other[d]	-1.986	0.047	-2.870	0.004
General Public	0.000	1.000	-0.535	0.593

[a] Stakeholder type or category was provided by participant's responses .
[b] Evaluations of the participants as outstanding and average were provided by the participating firm contact.
[c] Denotes Canada Customs and Revenue Agency, now renamed Canada Revenue Agency (CRA)
[d] Other category was used for those stakeholders who were identified only once or for stakeholders for whom it was unclear what shareholder was being identified.
[e] Non parametric tests were used for all stakeholder type variables; Levine's test was significant for the majority of variables. For some variables, Levine's test was not significant. T-tests were performed using those variables and the outcomes were similar.

Table 10

ANOVA Model for Judgment: Appropriateness of Auditor Judgment

Panel A: ANOVA for Auditor Judgment of Problematic Client[a]

Source of Variation	*Sum of Squares*	*df*	*Mean Squares*	*F-Value*	*p-value*
Outcome	20.064	1	20.064	24.187	0.000
Management Intention	1.751	1	1.751	2.110	0.149
Firm Evaluation[b]	2.391	1	2.391	2.882	0.092
Outcome x Intention	5.343	1	5.343	6.440	0.013
Outcome x Evaluation	0.348	1	0.348	0.419	0.519
Intention x Evaluation	8.697	1	8.697	10.484	0.002
Three-way Interaction	2.592	1	2.592	3.125	0.080

Panel B: ANOVA for Auditor Judgment of Other Client[c]

Source of Variation	*Sum of Squares*	*df*	*Mean Squares*	*F-Value*	*p-value*
Outcome	13.186	1	13.186	8.285	0.005
Management Intention	2.633	1	2.633	1.654	0.201
Firm Evaluation[b]	2.067	1	2.067	1.299	0.257
Outcome x Intention	5.733	1	5.733	3.602	0.060
Outcome x Evaluation	13.890	1	13.890	8.727	0.004
Intention x Evaluation	5.284	1	5.284	3.320	0.071
Three-way Interaction	8.215	1	8.215	5.161	0.025

[b] Problematic Client was the client in the scenario who either inadvertently or deliberately overvalued an asset.

[b] Evaluations of the participants as outstanding and average were provided by the participating firm contact.

[c] Other Client was the client in the scenario who was either inadvertently or deliberately affected.

Table 11
Results of Analyses of Selection of Appropriate Auditor Judgment Partitioned by Outcome Consequences

	Favorable		*Unfavorable*	
Selection of Alternatives[a]	*Z-statistic*	*p-value (two-tailed)*	*Z-statistic*	*p-value (two-tailed)*
Panel A: Problematic Client[c]				
Firm Evaluation[b]	-3.095	0.002	-1.352	0.176
Panel B: Other Client[d]				
Firm Evaluation[b]	-1.674	0.094	-2.297	0.022

[a] The numbered alternatives corresponded to the alternatives provided to participants (See Appendix C).

[b] Evaluations of the participants as outstanding and average were provided by the participating firm contact.

[c] Problematic Client is the client in the scenario who either inadvertently or deliberately overvalued an asset.

[d] Other Client was the client in the scenario who was either inadvertently or deliberately affected by the Problematic Client.

Table 12
Results of Analyses of Confidence in Appropriateness of Auditor Judgment Partitioned by Outcome Consequences

	Favorable[b]				*Unfavorable*[b]			
Firm Evaluation[a]	*N*	*Mean (Std Dev)*	*F*	*p-value*	*N*	*Mean (Std Dev)*	*F*	*p-value*
Panel A: Problematic Client[c]								
Expert[a]	33	87.73 (10.085)	3.37	0.071	33	86.36 (8.774)	4.161	0.001
Novice[a]	31	82.26 (13.592)			31	79.35 (14.547)		
Panel B: Other Client[d]								
Expert[a]	33	85.76 (10.542)	13.27	0.001	33	82.88 (11.594)	4.161	0.909
Novice[a]	31	74.52 (15.295)			31	83.23 (12.553)		

[a] Evaluations of participants as outstanding and average were provided by the participating firm contact.

[b] Outcome consequences were manipulated between the favorable and the unfavorable consequences.

[c] Problematic Client was the client in the scenario who either inadvertently or deliberately overvalued an asset.

[d] Other Client was the client in the scenario who was either inadvertently or deliberately affected by the Problematic Client.

Table 13

ANOVA Model for Judgment: Sanctions Against the Auditor

Panel A: ANOVA for Sanctions Selection regarding Problematic Client[a]

Source of Variation	*Sum of Squares*	*Df*	*Mean Squares*	*F-Value*	*p-value*
Outcome	49.779	1	49.779	30.822	0.000
Management Intention	1.389	1	1.389	0.860	0.356
Firm Evaluation[b]	1.570	1	1.570	0.972	0.326
Outcome x Intention	23.020	1	23.020	14.254	0.000
Outcome x Evaluation	12.150	1	12.150	7.523	0.007
Intention x Evaluation	25.031	1	25.031	15.499	0.000
Three-way Interaction	30.876	1	30.876	19.118	0.000

Panel B: ANOVA for Sanctions Selection regarding Other Client[c]

Source of Variation	*Sum of Squares*	*Df*	*Mean Squares*	*F-Value*	*p-value*
Outcome	47.181	1	47.181	34.129	0.000
Management Intention	12.150	1	12.150	8.739	0.004
Firm Evaluation[b]	23.742	1	23.742	17.174	0.000
Outcome x Intention	9.041	1	9.041	6.540	0.012
Outcome x Evaluation	28.638	1	28.638	20.715	0.000
Intention x Evaluation	1.617	1	1.617	1.170	0.282
Three-way Interaction	3.753	1	3.753	2.715	0.102

[a] Problematic Client was the client in the scenario who either inadvertently or deliberately overvalued an asset.

[b] Evaluations of participants as outstanding and average were provided by participating firm contact.

[c] Other Client was the client in the scenario who was either inadvertently or deliberately affected.

Table 14
Comparisons between Study Sample and Sub-Sample Treatment Groups' Dependent Variable Responses

	p-value					
Comparisons	*AP1*[b]	*AP2*[c]	*SEL1*[d]	*SEL2*[e]	*SC1*[f]	*SC2*[g]
Unfavorable outcome/inadvertent intentions 1 vs Unfavorable outcome/inadvertent consequences 2	0.889	0.906	0.899	0.846	0.836	0.807
Unfavorable outcome/deliberate intentions 1 vs Unfavorable outcome/deliberate intentions 2	0.729	0.823	0.799	0.856	0.874	0.901
Unfavorable outcome/inadvertent intentions 1 vs Favorable outcome/inadvertent consequences 2	0.8139	0.8259	0.865	0.904	0.800	0.900
Favorable outcome/deliberate intentions 1 vs Favorable outcome/deliberate intentions 2	0.911	0.909	0.879	0.920	0.900	0.991

[a] Ethical sensitivity was measured as the number of stakeholder types identified.
[b] Level of Appropriateness of auditor judgment regarding problematic client.
[c] Level of Appropriateness of auditor judgment regarding other client.
[d] Selection of appropriate auditor judgment regarding problematic client.
[e] Selection of appropriate auditor judgment regarding other client.
[f] Level of sanctions levied against auditor regarding problematic client.
[g] Level of sanctions levied against auditor regarding other client.
[h] 1 corresponds to original study sample and 2 corresponds sub-sample participant group.

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APPENDIX A: INFORMATION SHEET AND CONSENT FORM (FIRM CONTACT)

Brief Summary of A Research Proposal Research Study
On The Inter-Personal Sensitivity of Auditors

There is a large literature on audit expertise that has sought to document differences in technical knowledge between expert and novice auditors. This may sound like an easy task, but it is actually quite difficult to isolate precisely what experts know that novices do not. At the University of Alberta, we have sought to broaden the audit expertise literature to explore whether "experts" in public accounting firms are not only technically more proficient, but also more inter-personally sensitive than novices. Our research team has conducted a series of experiments on how well auditors can predict the preferences of their peers, subordinates and superiors. These studies have been conducted with audit managers and seniors as participants. Our initial findings are that managers and seniors who are considered to be outstanding by their firm (top managers and top seniors) are good at predicting the consensus judgments of other auditors (both other managers and other seniors), but are not good at predicting the preferences of specific other auditors. Audit Senior's who were viewed as being average by their firm, are poor at judging both consensus preferences of other auditors, as well as the preferences of specific identified auditor's.

In a second experiment we investigated performance evaluation procedures. Our initial findings are that audit seniors who are considered to be outstanding have a "halo" effect and evaluations of their work are biased upward by audit managers. Audit seniors who are average, appear to get an objective evaluation (with possibly some downward bias) from their managers. Again we find a strong top / average difference in these results. Top managers are very objective in their ratings, while average managers are very biased in their performance evaluations.

Our results to date suggest that auditors considered to be outstanding by their firm (top auditors) are technically more proficient than other auditors of the same rank, are better able to assess consensus preferences of other auditors, and are more objective in evaluating the work of their subordinates. We find stronger differences within ranks than between ranks. Top seniors are more like top managers than average managers. Looking for differences between ranks (manager vs senior) seems to be much less effective than looking for differences within ranks (top manager vs average manager).

We would like to extend the research literature to another dimension of inter-personal expertise – to the realm of moral sensitivity. How "expert" are auditors at identifying the parties who will be affected by their work, and what are the conditions that heighten (or reduce) sensitivity to other parties interests? Four other international accounting firms are also going to be approached and asked to participate in the study. We would like each firm to provide 18 audit seniors and 12 audit managers as participants. Since previous studies have been run using rank as well as the firm's own rating of auditors (at each rank) who are considered to be their "top" (their best performers), and average auditors (selected randomly from the remaining auditors at that rank), as independent variables, we would request each accounting firm to identify who they consider to be their top managers, and top audit seniors (based on your judgment of what "top" means), and an equal number of average participants at each rank. In previous studies, some accounting firms have used their

internal performance ratings to identify "top" and average audit seniors and managers. These firms identify "top" auditors from each rank who are their absolute best people (stars). Average auditors are randomly chosen from the remaining pool of auditors. Some other accounting firms have not been willing to use such performance rating data, and have used experience in rank as a proxy for top / average instead. Our previous studies suggest that experience in rank is a weaker proxy for expertise, but we would still welcome participants identified based on length of experience if you feel uncomfortable about using performance evaluation rating data. The research design is explained next, and we anticipate that the experiment will take about 45 minutes to complete.

Research Design

An experiment will be conducted to explore the inter-personal sensitivity of auditors. The experiment will be conducted in three stages. Key features of our design:

Stage 1 (Case Task)

Each participant will be given a short audit case that requires judgment. We have constructed and pilot tested four cases at the University of Alberta. The cases are based on facts taken from two audit textbook cases which have been modified for use in the experiment. Each participant will get only one case. The proposed experimental task will require participants to identify parties whose interests should be considered in the case scenario and further recommend a preferable course of action to be taken by the auditor. Participants will be randomly assigned to one of the four case scenarios. The cases are differentiated by both the nature of the audit issues involved and the outcome consequences resulting from the auditors' decisions. Upon identification of the parties whose interests should be considered, participants will record and rank those parties, indicate what each of those parties would prefer the auditor to do, recommend a preferable course of action from a number of alternatives, and indicate the percentage of other auditors (consensus judgment) who would have recommended each of those different alternatives.

Stage 2 (Evaluative Judgment)

In Stage 2, the auditor will be asked to evaluate the decision made by the auditor in the case, make a recommendation, and provide justification for that recommendation.

Stage 3 (Demographics and Ethical Reasoning Questionnaires)

Following completion of the first two stages, participants will be asked to provide some general demographic information (e.g., rank, number of years experience, gender) and will then be asked to complete a DIT instrument (an instrument used to measure ethical reasoning which is widely used in the ethics literature). All participants will be adult volunteers who will be asked to read and sign a consent form (attached), and will be free to exit from the experiment at any time they choose to do so. All data provided by participants will be confidential and known only to the researchers. Results of the study will provide only aggregate data so no individual and no single accounting firm (or office) will be individually identified. Data will be stored securely by the investigators and identified with a code (e.g., Senior #1). Subject names will not be revealed to any other person.

Your signature below indicates that you have read this Summary of the Research Proposal, understand the terms of your participation in this study and agree to those terms.

Thank you for your participation.

_____ _____

Signature of Participant Date

APPENDIX B: INFORMATION SHEET AND CONSENT FORM (PARTICIPANT)

You are invited to participate in a study of professional judgment in auditing. This study is being conducted for Mary Oxner's PH.D thesis at the University of Alberta. The study hopes to improve our understanding of the inter-personal expertise of auditors, and particularly the sensitivity of auditors to other parties who rely on the auditor. The objective of the study is to learn more about auditors' judgments and decision processes. I have a asked a senior partner in your firm to help me identify a cross section of potential participants who vary in terms of rank, seniority, area of expertise, performance ratings, and demographic variables such as age and gender.

This study is partitioned into three sections. In the first section, you will be asked to read a short audit case. While no case can provide you with all the information you may want to have, I have attempted to provide sufficient information to make the case meaningful. Following the case, you will be asked to identify parties whose interests should have been considered prior to the auditors making a decision. You will then be asked to make a judgment about the preferable course of action in this case, selecting from a list of four to five alternatives. Second, you will be asked to make an evaluative judgment about the appropriateness of the auditor's action and explain your thought process in making this evaluation. Third (finally), you will be asked to answer a short demographic questionnaire followed by a general questionnaire.

Your participation in this study is voluntary. Your decision to participate or not will not prejudice your future association with me (Mary Oxner), the Faculty of Business or the University of Alberta. If you decide to participate, you are free to discontinue participation at any time without prejudice. The estimated time to complete the study is 45 minutes.

Measures have been undertaken to ensure the anonymity and confidentiality of your responses. Please refrain from making any identifying marks on your paper including your name or initials. To ensure confidentiality, all data will be coded (e.g. Manager #1, Senior #1) and stored in a locked filing cabinet for a maximum of ten years and then the material will be destroyed. Only my graduate supervisor (Dr. Karim Jamal) and myself will have access to that data. To protect your anonymity, consent forms will be stored separately from the study materials. Results for this study will be analyzed and reported in aggregate. The analysis of the results is to be used in research activities that include presentations and publication of those aggregate results.

Your participation in this study will help us to better understand factors that affect

the decision process of auditors. The risks associated with participation revolve around the disclosure of confidential information. This may make some participants uncomfortable, however I would like to assure you that strict research protocols will be followed and every effort will be made to ensure that such a disclosure is avoided. I also want to assure you explicitly that no individual responses will be reported to any member of your firm, and your name will never be associated with any data reported in any research publication or presentation. If you have any questions or concerns during your participation in this study or at any time subsequently, I would be pleased to answer them. Additional people who are knowledgeable about this study are Dr. Karim Jamal, my Graduate Supervisor, Dr. David Cooper, Faculty of Business Ethics Review Board member, and Dr. Royston Greenwood, Chairman of the Faculty of Business Ethics Review Board. Contact information for each of those persons is as follows:

Mary M. Oxner
Department of Accounting and MIS
University of Alberta
ph# (902)867-5373
e-mail: moxner@ualberta.ca
or: mmoxner@stfx.ca

Dr. Karim Jamal
Department of Accounting and MIS
University of Alberta
ph# (780) 492-5829
e-mail: Karim.Jamal@ualberta.ca

Dr. David Cooper
Faculty of Business Research Ethics Board, University of Alberta
ph# (780) 492-5413
e-mail: David.Cooper@ualberta.ca

Dr. Royston Greenwood
Chair, Faculty of Business Research Ethics Board
University of Alberta
ph# (780) 492-2797
e-mail:
Royston.Greenwood@ualberta.ca.

If you would like a copy of the research results please attach your business card with your responses or fax, phone, e-mail or mail your contact information to me.

Your signature below indicates that you have read this Information Sheet and Consent Form, understand the terms of your participation in this study and agree to those terms.

Thank you for your participation.

_____ _____

Signature of Participant Date

APPENDIX C: EXPERIMENTAL CASE SCENARIO AND QUESTIONS

Strathcona Water Works Company (SWW) is an Alberta based contractor that specializes in building water treatment plants in Alberta and Saskatchewan. SWW's head office is in rural Alberta and the company remains the largest employer in the town in which its head office is located. In building and maintaining water treatment plants, the valve is an essential part of the building process as the valves control the flow of water into and from the water treatment facility. Consequently the valves comprise a significant component of the water treatment plant cost. SWW has been purchasing its valves from Derrick Industrial Supplies (DIS), also an Alberta based company.

SWW recently acquired a contract to build a new water treatment facility in a nearby community. That community has grown quickly and the current water treatment facility is not able to handle the needs of the growing community. The community's town council has set aside funds from its budget for the next 20 years to pay off the loan required to pay for the construction of the new water treatment plant. The facility as designed requires a specialized valve. The cost of the valves is substantial and SWW required a bank loan in order to purchase the supply of valves that they required. The management of SWW is anxious about the project as a large part of their remuneration is dependent upon the success and profitability of this project. SWW has had to forego other projects and lay off some of its work force because of the resources required for this current water treatment plant project. SWW contacted DIS to supply the specialized valves as they have dealt with DIS for a large number of projects in the past. DIS accepted the contract of supplying the specialized valves based on a cost plus 20% pricing scheme.

SWW and DIS have the same auditors. During the fiscal year 2000 audit of DIS the auditors determined that DIS is violating its agreement with SWW by charging a markup of 100% on the specialized valves for this project instead of the 20% as agreed between SWW and DIS. An analysis of the cost computation shows that included in the computation of the cost of the valves is a large consulting fee paid to a Bermuda affiliate. DIS is also routing parts bought in the Unites States through the Bermuda affiliate and significantly increasing the price of the transfer back into Canada and passing along those inflated costs to SWW.

The auditors discussed the matter with DIS's management. There appears to be no real consulting services provided by the Bermuda affiliate and no good rational for the high transfer prices charged except to artificially inflate the cost base on which the valves are priced. Management offered some vague argument about huge demand and competitive conditions and claims these are special arrangements due to extremely competitive conditions. Calculations done on a more conservative definition of cost suggests that DIS is earning margins of 100% to 500% on the valves. They reminded their auditors that they are required to keep all information obtained in the audit confidential. Meanwhile, the audit of SWW was coming to an end and the auditors are required to sign an audit report for SWW in the following

week. The valve inventory that SWW was carrying was materially overstated by the inflated amount charged by DIS. The DIS audit would also come to an end in the following month.

For the fiscal 2000 year-end financial statements, the auditors issued an unqualified report for both DIS and SWW.

Six months later the water treatment plant project was completed to the community's and SWW's satisfaction. SWW is happy with the suitability of the specialized valves provided by DIS and intends on contracting them for future projects. SWW, based on the success of the project, has been approached by other communities who are interested in either updating or building new water treatment facilities.

I. In order to make a decision about the appropriateness of the action taken by the auditors of both DIS and SWW, we want you to first identify all the parties whose interests should have been considered in each audit.

Please list any and all parties in their order of importance in the spaces provided. Further, please indicate what action each of these parties would have preferred the auditors to take. (**The spaces below are provided for your convenience only and are not an indication of the number of responses expected**.)

DIS	**SWW**
1) Most important party: _____	Most important party: _____
Preferred auditor action: _____ _____ _____ _____	Preferred auditor action: _____ _____ _____ _____
2) Second most important party: _____	Second most important party: _____
Preferred auditor action: _____ _____ _____ _____	Preferred auditor action: _____ _____ _____ _____
3) Third most important party: _____	Third most important party: _____
Preferred auditor action: _____ _____ _____	Preferred auditor action: _____ _____ _____

4) Fourth most important party:

Preferred auditor action:

Fourth most important party:

Preferred auditor action:

5) Fifth most important party:

Preferred auditor action:

Fifth most important party:

Preferred auditor action:

6) Sixth most important party:

Preferred auditor action:

Sixth most important party:

Preferred auditor action:

7) Seventh most important party:

Preferred auditor action:

Seventh most important party:

Preferred auditor action:

8) Eighth most important party:

Preferred auditor action:

Eighth most important party:

Preferred auditor action:

9) Ninth most important party:

Preferred auditor action:

Ninth most important party:

Preferred auditor action:

10) Tenth most important party:

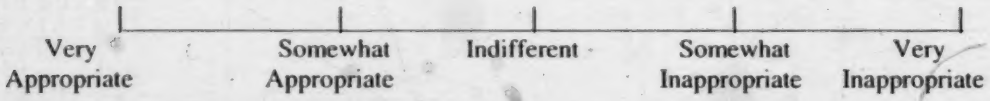
Preferred auditor action:

Tenth most important party:

Preferred auditor action:

II. Reflecting on the appropriateness of the decision made by the auditors in this scenario:

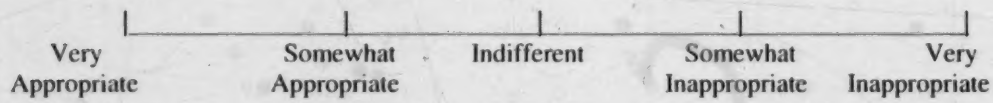
a) Rate the appropriateness of the action taken by the auditors of **DIS** by circling one of the following:



How confident are you of the above response? Please use a number between 0 (not at all confident) to 100(extremely confident).

I am _____% confident in my response above.

b) Rate the appropriateness of the action taken by the auditors of **SWW** by circling one of the following:



How confident are you of the above response? Please use a number between 0 (not at all confident) to 100(extremely confident).

I am _____% confident in my response above.

III. An audit assistant had identified the following possible alternatives for both audits:

DIS Audit	**SWW** Audit
1) Issue an unqualified report since their the financial statements are fairly presented.	1) Issue an unqualified report since information from the DIS audit cannot be used on the SWW audit.
2) Qualify the report for an overpricing in valve sales that has not been disclosed.	2) Writedown the value of the valve inventory to lower of cost or market. Don't tell management why the writedown in inventory value was required.
3) Resign from the audit.	
4) Set up an allowance for the overpricing of the valves and bury it in the the financial statements as other expenses.	3) Tell management of SWW of DIS's pricing scheme and write down their inventory of valves.
5) Report DIS to a Government Regulator.	4) Resign from the audit.

a) Select the alternative that you would have advised the auditors of **DIS** to take:

_____

Please explain:_____

_____

_____

b) Select the alternative that you would have advised the auditors of **SWW** to take:

_____

Please explain:_____

_____

_____

IV. A group of other auditors are participating in this study, what percentage of them would have chosen each of those alternatives?

DIS Audit Alternatives	**SWW** Audit Alternatives
1)_____%	1)_____%
2)_____%	2)_____%
3)_____%	3)_____%
4)_____%	4)_____%
5)_____%	100 %
100 %	

V. Suppose you are performing the role of the practice reviewer for the provincial institute and these two cases (DIS and SWW) came to your attention as part of your practice review activity.

a) As a practice reviewer, you are required to make a recommendation to the professional conduct committee on the **DIS** case. Please circle one of the six options below.

(1) Exonerate (no penalty and no further action levied)

(2) Reprimand (require the auditor to not engage in such conduct again)

(3) Fine (a monetary penalty of up to $10,000 per finding)

(4) Temporary Suspension (for a stated time period)

(5) Practice Restrictions (e.g. require supervision by an experienced CA)

(6) Cancellation or Resignation of Designation (not able to practice as a CA)

The practice reviewer is usually required to prepare a report with a recommendation and justification for the professional conduct committee. Please write a report concerning the auditor of **DIS.**

b) As a practice reviewer, you are required to make a recommendation to the professional conduct committee on the SWW case. Please circle one of the six options below.

(1) Exonerate (no penalty and no further action levied)
(2) Reprimand (require the auditor to not engage in such conduct again)
(3) Fine (a monetary penalty of up to $10,000 per finding)
(4) Temporary Suspension (for a stated time period)
(5) Practice Restrictions (e.g. require supervision by an experienced CA)
(6) Cancellation or Resignation of Designation (not able to practice as a CA)

The practice reviewer is usually required to prepare a report with a recommendation and justification for the professional conduct committee. Please write a report concerning the auditor of **SWW.**

APPENDIX D: QUESTIONNAIRE: DEMOGRAPHIC INFORMATION

Please answer the following questions. These questions give us an opportunity to gather some general demographic information about participants in this study.

1) Age _____

2) Gender _____/male _____/female

3) What is your position in the firm? _____

4) How long have you held this position? _____ Years

5) How long have you been with this firm? _____ Years

6) How long have you worked in the auditing profession? _____ Years

7) Approximately what level of billable hours did you charge last year? (Please circle one of the ranges below.)

a) < 1000 hours
b) 1000 - 1499 hours
c) 1500 - 1999 hours
d) > 2000 hours

8) Have you ever been in the circumstances described in the scenario? If yes, please comment. _____ Yes _____ No

_____
_____
_____
_____

9) Please rate the activity of **DIS** in the case scenario by circling a number below:

1------- 2------- 3--------- 4------- 5------- 6------- 7------- 8------- 9

Not at all Fraudulent — Extremely Fraudulent

10) Please rate the outcome consequences to the auditors in the case scenario by circling a number below:

1------- 2------- 3--------- 4------- 5------- 6------- 7------- 8------- 9

Not at all Adverse — Extremely Adverse

APPENDIX E: DEFINING ISSUES TEST ("DIT")

This questionnaire is aimed at understanding how people think about social problems. Different people often have different opinions about questions of right and wrong. There are no "right" answers. We would like you to tell us what you think about three problem stories.

Heinz and the Drug

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, the druggist was charging ten times what the drug cost to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow money, but he could only get together about $1,000 which is half of what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money on it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.

Should Heinz steal the drug? (check one)

____ Should steal it ____ Can't decide ____ should not steal it

Please rate the following statements in terms of their importance in making a decision about what to do in the dilemma. (1= Great importance, 2=Much importance, 3=Some importance, 4=Little importance, 5=No importance)

_____1. Whether a community's laws are going to be upheld.
_____2. Isn't it only natural for a loving husband to care so much for his life that he'd steal?
_____3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?
_____4. Whether Heinz is a professional wrestler, or had considerable influence with professional wrestlers.
_____5. Whether Heinz is stealing for himself or doing this solely to help someone else.
_____6. Whether the druggist's rights to his invention have to be protected.
_____7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.
_____8. What values are going to be the basis for governing how people act towards each other?
_____ 9. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow.
_____ 10. Whether the law in this case is getting in the way of the most basic claim of any member of society.
_____ 11. Whether the druggist deserves to be robbed for being so greedy and cruel.
_____ 12. Would stealing in such a case bring about more total good for the whole society or not?

Now please rank the top four most important statements. Put the number of the statement in the blank.

Most important _____ Second most important _____
Third most important _____ Fourth most important _____

Escaped Prisoner

A man had been sentenced for 10 years. After one year, however, he escaped from prison, moved to a new area of the country and took on the name of Thompson. For 8 years he worked hard and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages and gave most of his own profits to charity. Then one day, Mrs. Jones, an old neighbor, recognized him as the man who had escaped from prison 8 years before, and for whom the police had been looking.

Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison? (Check one)

____ Yes, should report him _____ Can't decide ___ No, should not report him

Please rate the following statements in terms of their importance in making a decision about what to do in the dilemma. (1= Great importance, 2=Much importance, 3=Some importance, 4=Little importance, 5=No importance)

___ 1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
___ 2. Everytime someone escapes punishment for a crime, doesn't that just encourage more crime?
___ 3. Wouldn't we be better off without prison and the oppression of our legal systems?
___ 4. Has Mr. Thompson really paid his debt to society?
___ 5. Would society be failing what Mr. Thompson should fairly expect?
___ 6. What benefits would prisons be apart from society, especially for a charitable man?
___ 7. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?
___ 8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
___ 9. Was Mrs. Jones a good friend of Mr. Thompson?
___ 10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
___ 11. How would the will of the people and the public good best be served?
___ 12. Would going to prison do any good for Mr. Thompson or protect anybody?

Now please rank the top four most important statements. Put the number of the statement in the blank.

Most important _____ Second most important _____
Third most important _____ Fourth most important _____

Newspaper

Fred, a senior in high school, wanted to publish a newspaper for students so that he could express many of his opinions. He wanted to speak out against some of the school's rules.

When Fred started his newspaper, he asked his principal for permission. The principal said it would be all right if before every publication Fred would run in all his articles for the principal's approval. Fred agreed and turned in several articles for approval. The principal approved all of them and Fred published two issues for the paper in the next two weeks.

But the principal had not expected that Fred's newspaper would receive so much attention. Students were so excited by the paper that they began to organize protests against some of the school's rules. Angry parents objected to Fred's opinions. They phoned the principal telling him that the newspaper should not be published. As a result of the rising excitement, the principal ordered Fred to stop publishing. He gave as a reason that Fred's activities were disruptive to the operation of the school.

Should the principal stop the newspaper?

_____ Should stop it _____ Can't decide _____ Should not stop it

Please rate the following statements in terms of their importance in making a decision about what to do in the dilemma. (1= Great importance, 2=Much importance, 3=Some importance, 4=Little importance, 5=No importance)

___ 1. Is the principal more responsible to students or to the parents?
___ 2. Did the principal give his word that the newspaper could be published for a long time, or did he just promise to approve the newspaper one issue at a time?
___ 3. Would the students start protesting even more if the principal stopped the newspaper?
___ 4. When the welfare of the school is threatened, does the principal have the right to give orders to students?
___ 5. Does the principal have the freedom of speech to say "no" in this case?
___ 6. If the principal stopped the newspaper would he be preventing full discussion of important problems?
___ 7. Whether the principal's order would make Fred lose faith in the principal.
___ 8. Whether Fred was really loyal to his school and patriotic to his country.
___ 9. What effect would stopping the paper have on the student's education in critical thinking and judgments?
___ 10. Whether Fred was in any way violating the rights of others in publishing his own opinions.
___ 11. Whether the principal should be influenced by some angry parents when it is the principal that knows best what is going on in the school.
___ 12. Whether Fred was using the newspaper to stir up hatred and discontent.

Now please rank the top four most important statements. Put the number of the statement in the blank.

Most important _____ Second most important _____
Third most important _____ Fourth most important _____

APPENDIX F: STUDY COMPLETION AND INFORMATION REQUEST FORM

You have now **completed** the study. Please put the Information Sheet and Consent Form in one envelope and the remaining study material other than this form in the second envelope. Ensure the envelopes are sealed and give those envelopes to the contact person in your firm.

Thank you again for your participation.

This study is being conducted to better understand the decision making process of auditors. Auditors are accountable to various parties and their decisions may affect those various parties. This study specifically investigates how the nature of the issue and consequences may affect both the identification of parties affected by decisions and the selection of the appropriate decision outcome.

If you would like to discuss any aspect of this study, the contact information of those knowledgeable about the study is as follows:

Mary M. Oxner CA
Department of Accounting and MIS
University of Alberta
ph# (902)867-5373
e-mail: moxner@ualberta.ca
or mmoxner@stfx.ca

Dr. Karim Jamal CA
Department of Accounting and MIS
University of Alberta
ph# (780) 492-5829
e-mail: Karim.Jamal@ualberta.ca

Dr. David Cooper
Faculty of Business Research Ethics Board, University of Alberta
ph# (780) 492-5413
e-mail: David.Cooper@ualberta.ca

Dr. Royston Greenwood
Chair, Faculty of Business Research Ethics Board
University of Alberta
ph# (780) 492-2797
e-mail: Royston.Greenwood@ualberta.ca.

Further, if you would like to obtain a copy of the results of the study or other details of the study, please fill out the following and send or e-mail it to one of the addresses below.

Mail to:

Mary Oxner CA
Faculty of Business
University of Alberta
Business Building
Edmonton, AB T6G 2R6
moxner@ualberta.ca

or

Mary Oxner CA
Assistant Professor
St. Francis Xavier University
PO Box 5000
Antigonish, NS B2G 2W5
mmoxner@stfx.ca

Send info to: _____

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_____

or e-mail to: _____